HIGHLIGHTS

REVISION NO. 33 Jun 01/10

Pages which have been revised are outlined below, together with the Highlights of the Revision

CH/SE/SU C PAGES	REASON FOR CHANGE	EFFECTIVITY
CHAPTER 33		
L.E.P. 1- 6	Revised to Reflect this revision indicating new,revised, and/or deleted pages	
33-14-00	Minor additions and amplification	
301, 303	**DELETED CROSS REFERENCE TEM 33-14-00**	
33-42-21	Minor additions and amplification	
401, 403- 404, 406- 407, 409- 410, 412- 414, 416- 418	**REVISED MATERIAL DESIGNATION**	
33-48-17	Layout Improved or Effectivity Updated	
403		

Printed in France

CHAPTER 33

LIGHTS

LIST OF EFFECTIVE PAGES

N, R or D indicates pages which are New, Revised or Deleted respectively
Remove and insert the affected pages and complete the Record of Revisions and the Record of Temporary Revisions as necessary

CH/SE/SU	C	PAGE	DATE
RECORD			
OF TEMP.			
REVISION			
L.E.P.	R	1- 6	Jun01/10
T. of C.		1	Jun01/06
T. of C.		2	Jun01/09
T. of C.		3	Dec01/06
T. of C.		4	Dec01/06
T. of C.		5	Dec01/06
T. of C.		6	Dec01/06
T. of C.		7	Jun01/08
T. of C.		8	Jun01/08
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33-00-00		3	Dec01/90
33-00-00		4	Dec01/90
33-00-00		5	Dec01/90
33-00-00		6	Dec01/90
33-00-00		7	Dec01/90
33-00-00		8	Dec01/90
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33-00-00		12	Dec01/90
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33-10-00		2	Dec01/90
33-10-00		3	Jun01/94
33-10-00		4	Jun01/94
33-10-00		5	Jun01/04
33-10-00		6	Jun01/04
33-12-00		1	Jun01/05
33-12-00		2	Dec01/90
33-12-00		3	Dec01/90
33-12-00		4	Jun01/99
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33-12-00		901	Jun01/06
33-12-00		902	Jun01/06
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33-12-11		402	Dec01/90
33-12-11		403	Jun01/95
33-12-32		401	Jun01/95
33-12-32		402	Dec01/90
33-12-32		403	Jun01/95
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33-14-00		503	Jun01/05

CH/SE/SU	C	PAGE	DATE
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33-21-00		519	Dec01/06

CH/SE/SU	C	PAGE	DATE
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33-26-21		404	Jun01/04
33-26-21		405	Jun01/04

CH/SE/SU	C	PAGE	DATE
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CHAPTER 33

LIGHTS

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DOOR EXIT SIGN - MODULE	33-51-13			
Removal/Installation			401	ALL
POWER SUPPLY UNIT	33-51-14			
Removal/Installation			401	ALL
FLOOR ESCAPE PATH MARKING LIGHTING	33-51-17			
Removal/Installation			401	ALL
OVERWING - EMERGENCY LIGHT	33-51-18			
Maintenance Practices			201	ALL
LAVATORY AUXILIARY LIGHT	33-51-21			
Removal/Installation			401	ALL

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1. General

All-weather flying at all hours necessitates equipping the aircraft with interior and exterior lighting and luminous indicators.
The lighting system, supplied by normal and emergency electrical circuits, provides in-flight safety, equipment monitoring, passenger comfort and illumination of the working surfaces.
The lighting equipment is utilized to illuminate the flight compartment, passenger compartment, cargo and service compartments, the aircraft exterior, annuciator and warning lights.
The emergency lighting system provides illumination in case of failure of the normal lighting system and is used during an emergency evacuation of the aircraft.

A. Flight Compartment (Ref. Fig. 001)

The flight compartment lighting system comprises direct and integral illumination. Electrical circuits are provided for testing and dimming the indicator lights and resetting the magnetic indicators.

B. Passenger Compartment (Ref. Fig. 002)

In the passenger compartment, the entrance areas, lavatories and galleys are illuminated by fluorescent tubes. Electrical circuits are provided for the illumination of the call system, passenger instruction and indication signs and for the individual passenger-space lighting.

C. Cargo and Service Compartment (Ref. Fig. 003)

Illumination of the service area, the air conditioning duct and accessory compartment, the FWD, AFT and BULK cargo compartment, the equipment compartment and the wheel well is provided by incandescent lamps.

D. Exterior (Ref. Fig. 004)

External lighting comprises the navigation lights, landing lights, runway turn-off lights, taxi and take-off lights, anticollision lights, strobe lights, wing and engine scan lights and logo light.

E. Emergency Lighting (Ref. Fig. 005)

The emergency lighting system comprises the lighting of the passenger compartment and lavatory auxiliary lighting.

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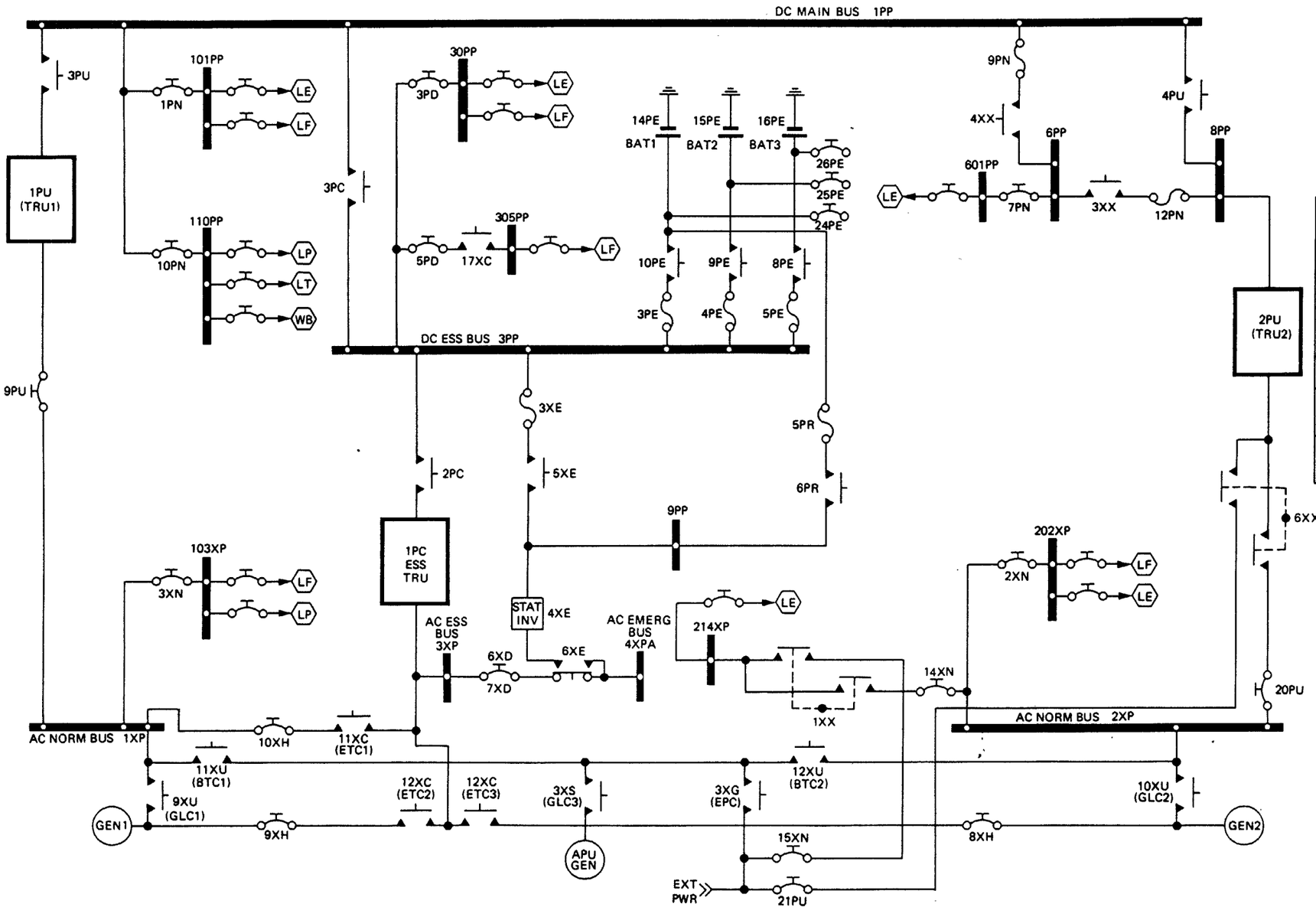

FLIGHT COMPARTMENT		
SYSTEM	CODE	BUS BAR
GENERAL ILLUMINATION	LE	101PP, 303PP, 601PP, 202XP, 214XP
INSTRUMENT AND PANEL INTEGRAL LIGHTING	LF	101PP, 303PP, 305PP, 103XP, 202XP
ANNUNCIATOR LIGHT TEST	LP	110PP, 103XP
ANNUNCIATOR LIGHT DIMMING	LT	110PP
MAINTENANCE MAGNETIC INDICATOR RESETTING	WB	110PP

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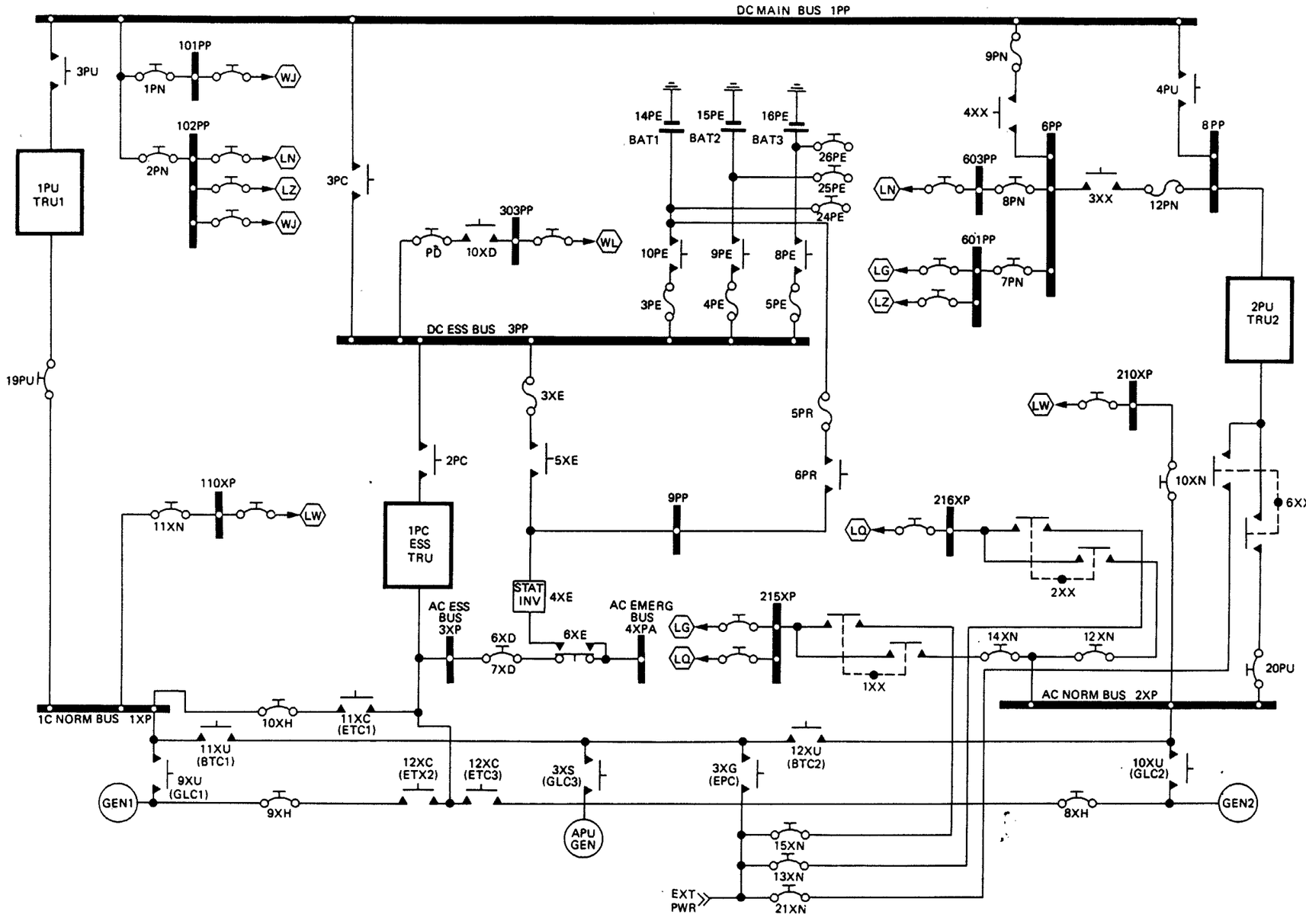
Flight Compartment Power Supply
Figure 001



PASSENGER COMPARTMENT		
SYSTEM	CODE	BUS BAR
GENERAL ILLUMINATION	LG	601PP, 215XP
CALL SYSTEM	LN	102PP. 603PP
LAVATORY LIGHTING	LQ	215XP. 216XP
PASSENGER READING LIGHT	LW	110XP, 210XP
CABIN ATTENDANT WORK LIGHTS	LZ	102PP, 601PP
PASSENGER LIGHTED SIGNS	WJ	101PP, 102PP

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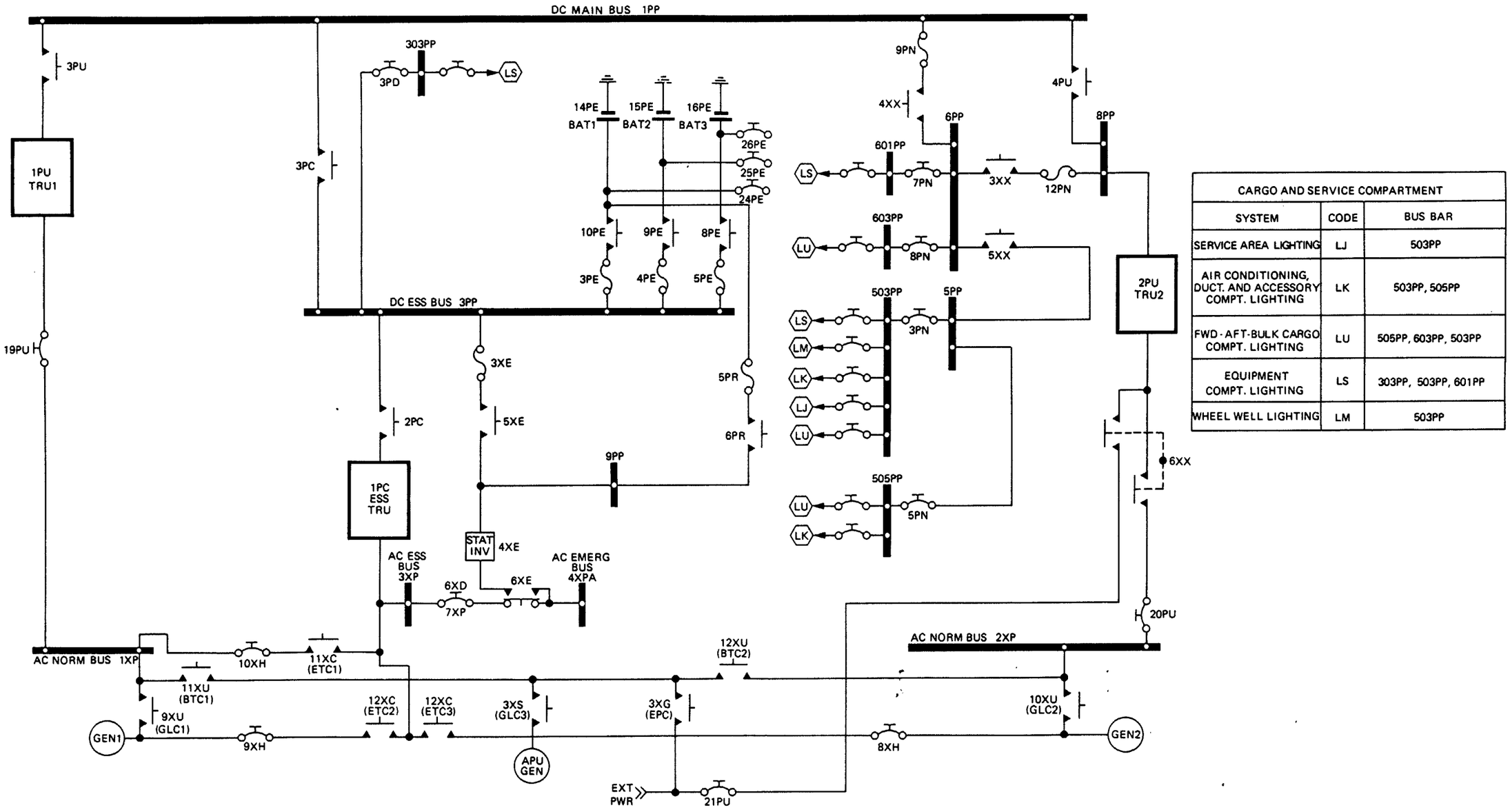
Passenger Compartment Power Supply
Figure 002



CARGO AND SERVICE COMPARTMENT		
SYSTEM	CODE	BUS BAR
SERVICE AREA LIGHTING	LJ	503PP
AIR CONDITIONING, DUCT. AND ACCESSORY COMPT. LIGHTING	LK	503PP, 505PP
FWD - AFT-BULK CARGO COMPT. LIGHTING	LU	505PP, 603PP, 503PP
EQUIPMENT COMPT. LIGHTING	LS	303PP, 503PP, 601PP
WHEEL WELL LIGHTING	LM	503PP

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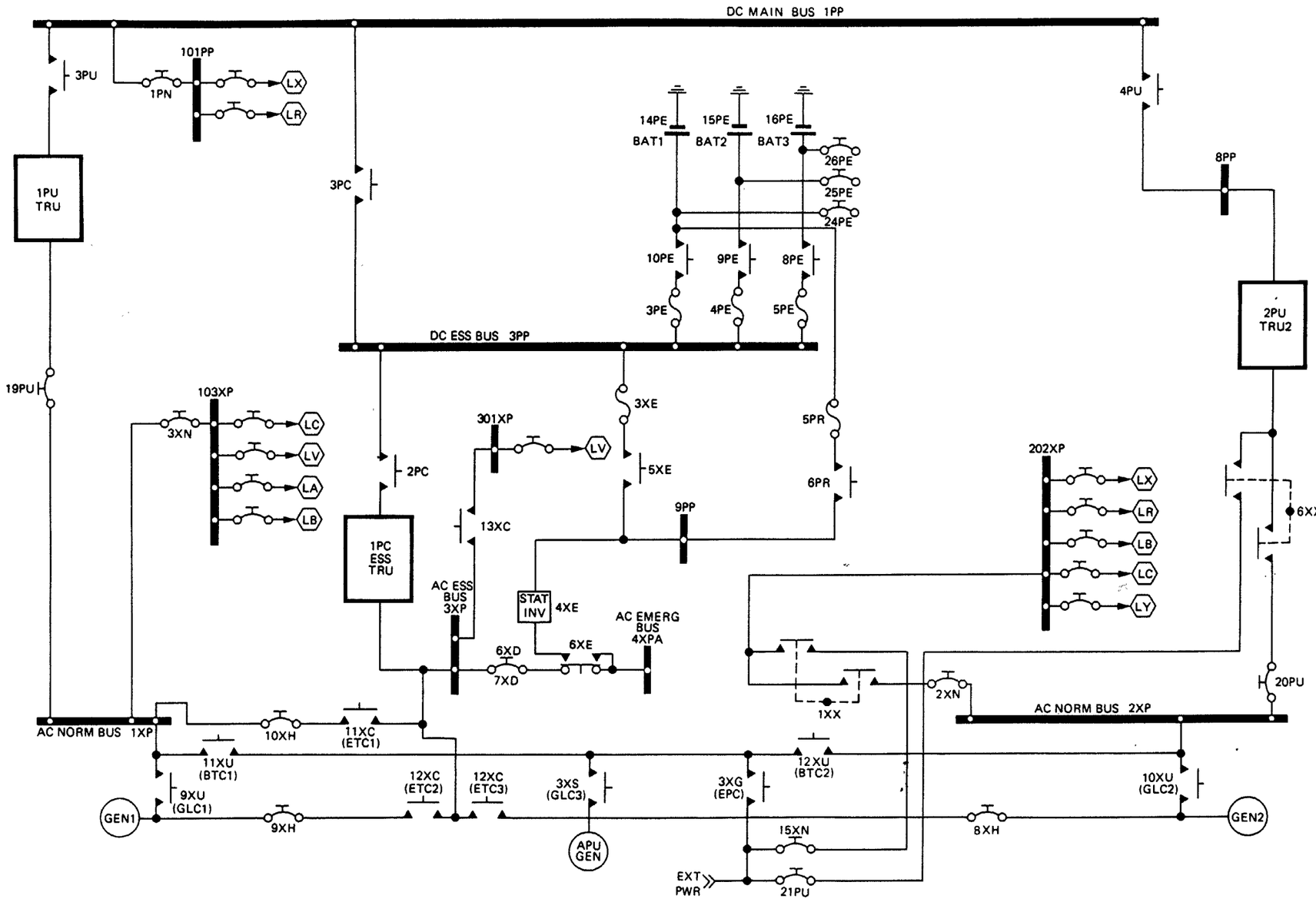
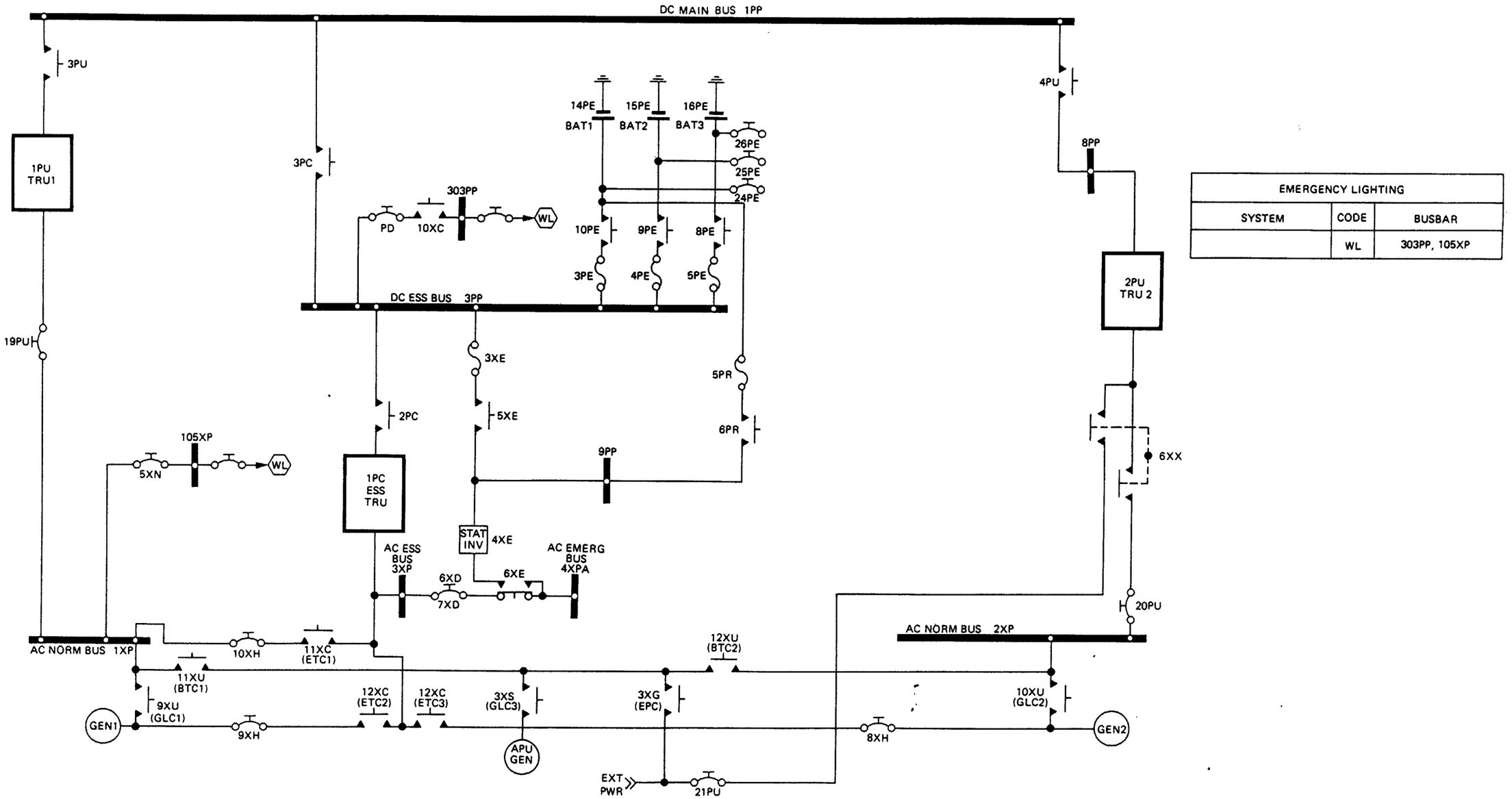
Cargo and Service Compartment Power Supply
Figure 003



EXTERIOR		
SYSTEM	CODE	BUS BAR
NAVIGATION LIGHT	LA	103XP, 202XP
LANDING LIGHTS	LB	103XP, 202XP
RUNWAY TURN OFF LIGHTS	LC	103XP, 202XP
TAXI AND TAKE OFF LIGHTS	LR	101PP, 202XP
LOGO LIGHTS	LY	202XP
ANTI – COLLI – LIGHTS	LV	301XP, 103XP
WING AND ENGINE SCAN LIGHTING	LX	101PP, 202XP

BM6 33 00 00 0 AG M O

Exterior Power Supply
Figure 004



EMERGENCY LIGHTING		
SYSTEM	CODE	BUSBAR
	WL	303PP, 105XP

BM6 33 00 00 0 AJMO

Emergency Lighting Power Supply
Figure 005

1. Flight Compartment Lighting
Flight Compartment Lighting comprises the following systems :
(Ref. Fig. 001)

R **ON A/C 001-100,

(Ref. Fig. 001)

R **ON A/C 101-200,

(Ref. Fig. 002)

R **ON A/C ALL

A. Flight compartment general illumination provided by dome lights, as well as lighting of panels and instruments provided by flood lights and lighting of work surfaces.

B. Integral lighting enables indications to be read on panels and instruments.

C. Annunciator Light Test
The test checks correct operation of annunciator lights.

D. Annunciator Light Dimming
Enables the crew to reduce lighting intensity of annunciator lights.

E. Memorized Fault Annunciators
They memorize failure information for use by maintenance personnel.

F. Spare Bulb Box
A spare bulb box is provided in the flight compartment on panel 122VU.

2. Regulations to be Fulfilled
- FAR 25.1301 Amendment 41
- Function and installation
FAR 25.1353 paragraph a and b Amendment 41
- Electrical equipment and installation
FAR 25.1357 Amendment 41
- Circuit protection.

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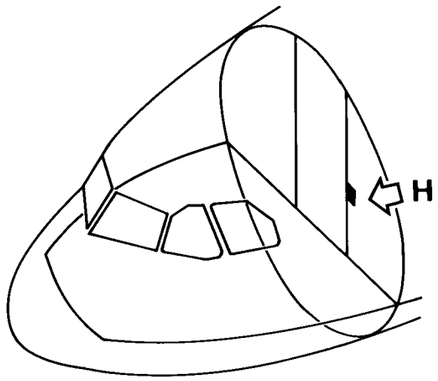

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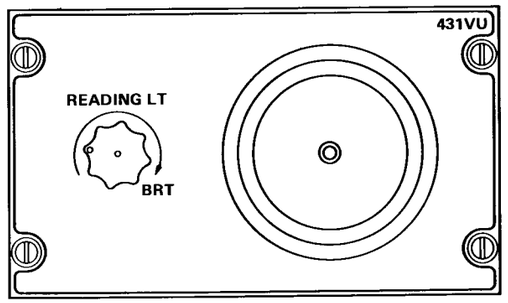

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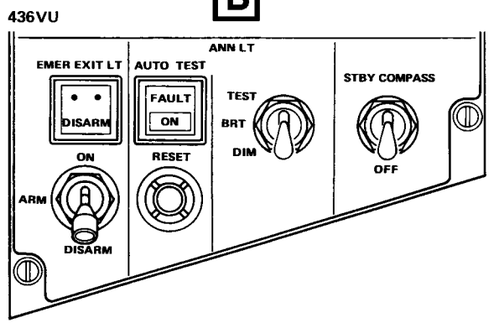

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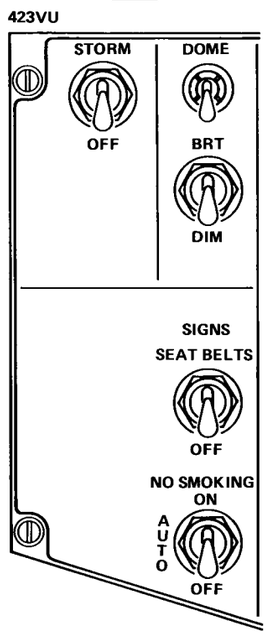

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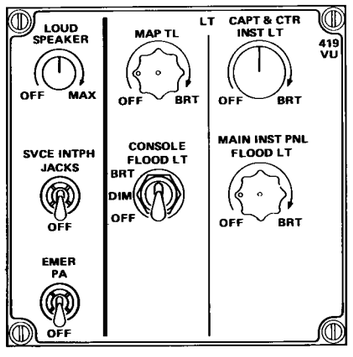

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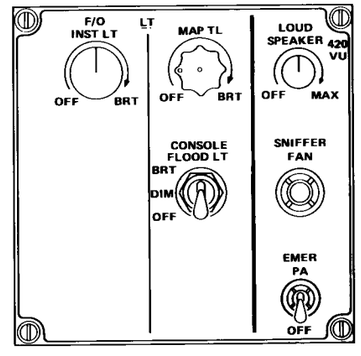

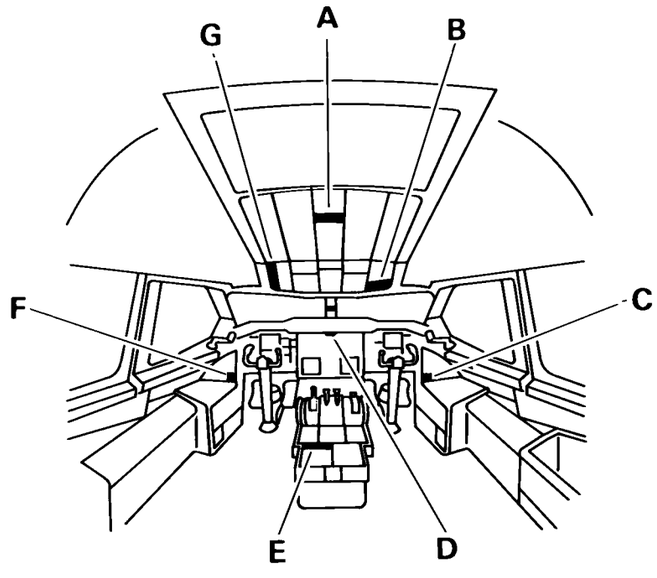

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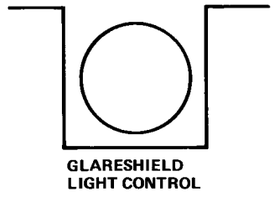
D



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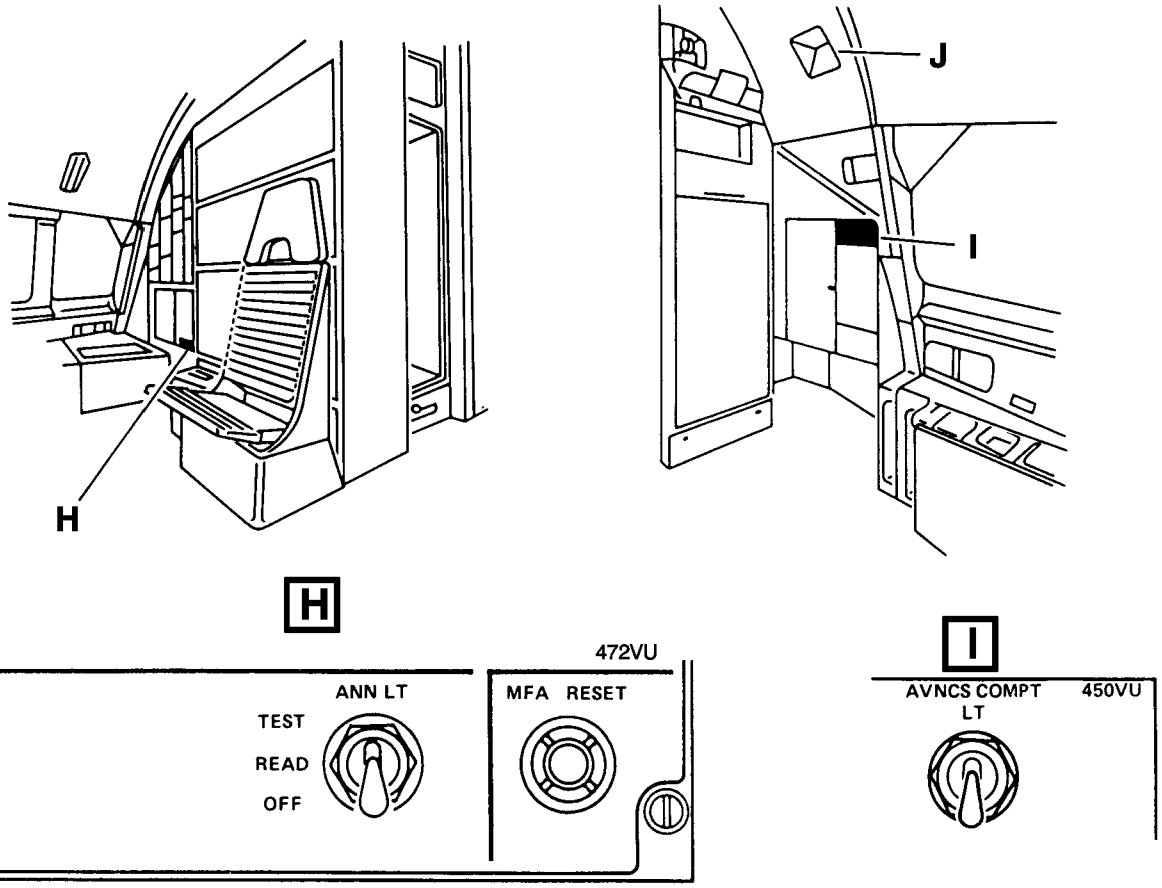
Flight Compartment - Illumination Sheet 1/2
Figure 001

R



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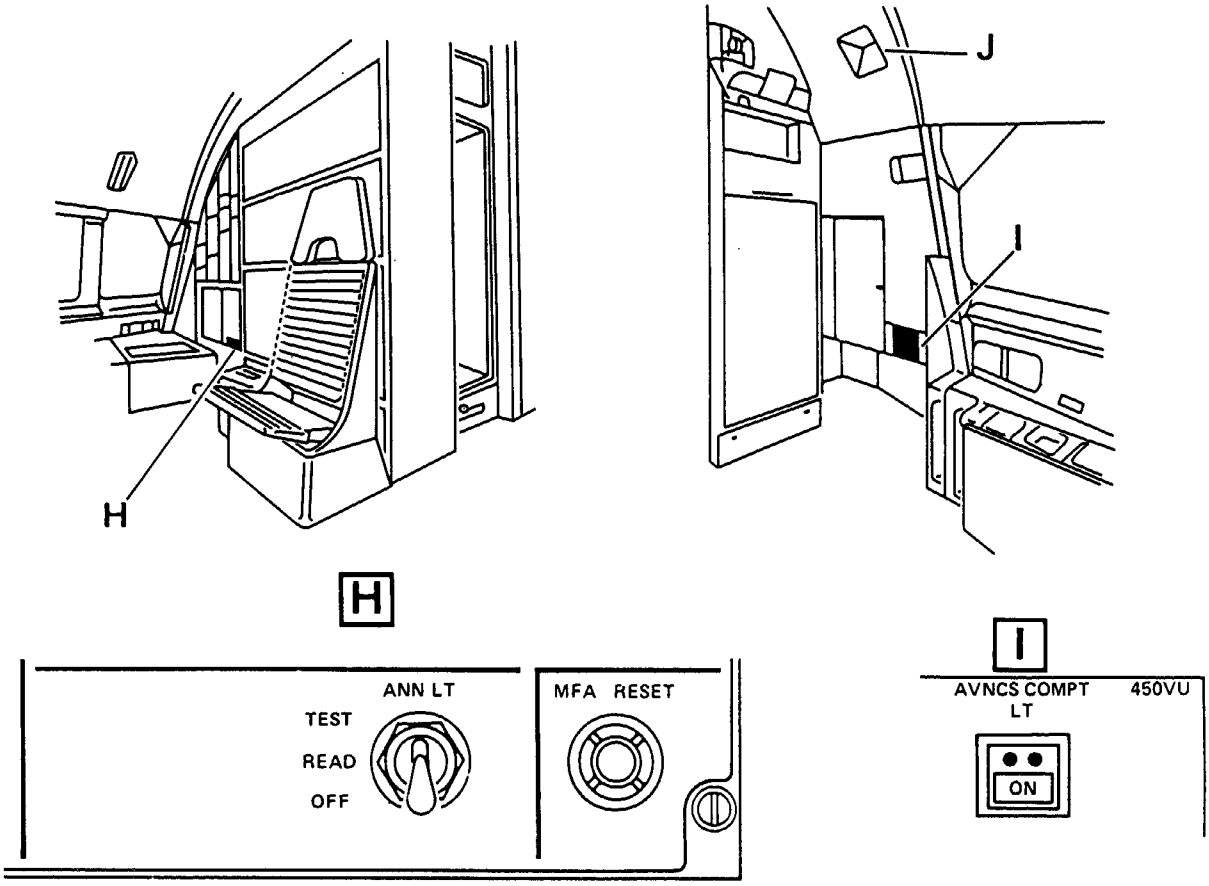
Flight Compartment - Illumination Sheet 2/2
Figure 001



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Flight Compartment - Illumination Sheet 2/2
Figure 002

GENERAL ILLUMINATION - DESCRIPTION AND OPERATION

R 1. General

The general illumination system enables the flight compartment equipment details and all necessary inscriptions and indications to be clearly seen even in poor light.
The illumination system is particularly useful at night for pre-flight and post-flight operations.
The light sources are as follows :

A. General flight compartment lighting by ceiling mounted dome lights.

B. Instrument panel lighting by flood lights and fluorescent tubes.

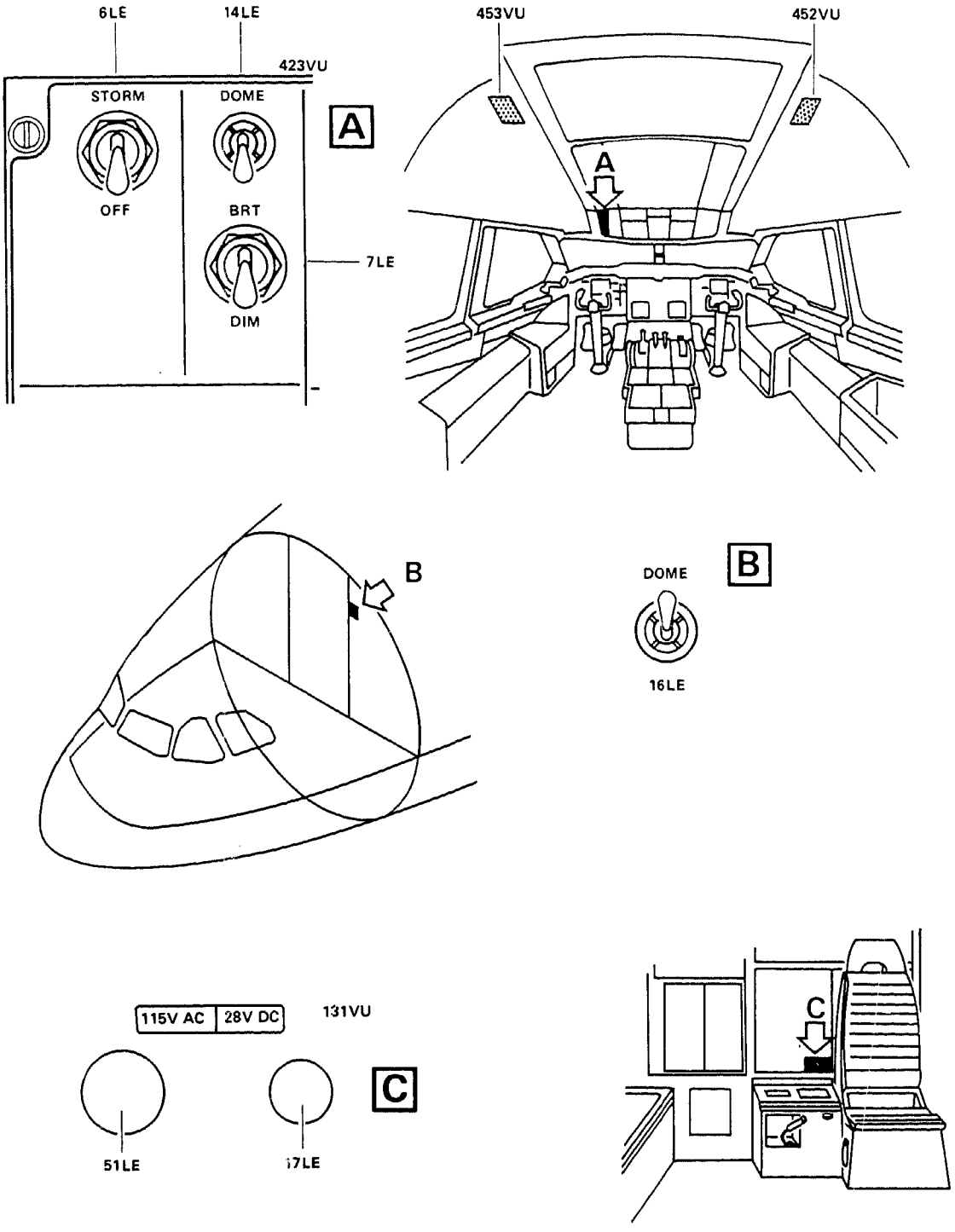
C. Work surface illumination by map reading lights, and console lights.

D. Floor lighting by Captain and First Officer underseat lights.

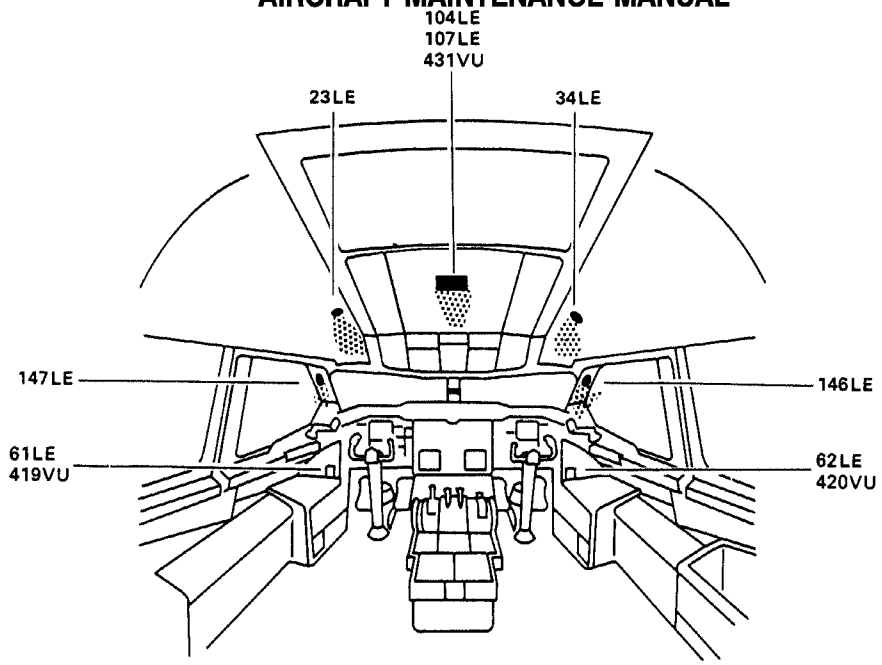
E. The equipment also includes 28VDC and 115 V/400 Hz electrical outlets.

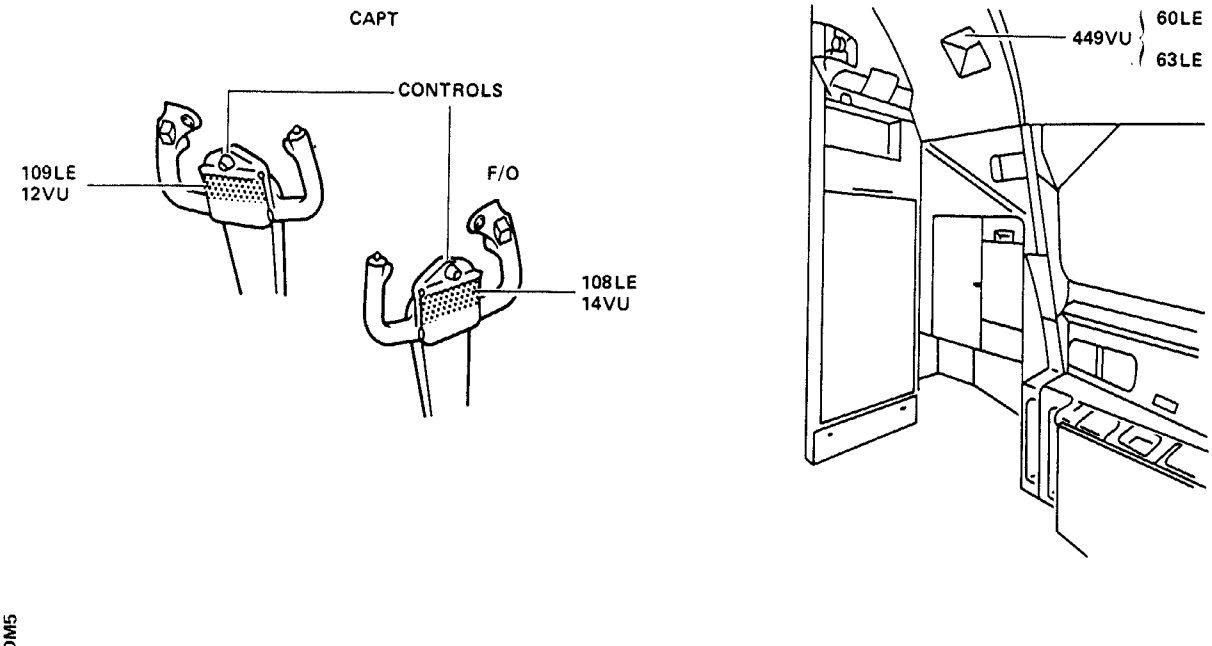
R 2. Component Location

(Ref. Fig. 001)
(Ref. Fig. 002)
(Ref. Fig. 003)
(Ref. Fig. 004)



Dome Lights and Electrical Outlets Component Location
Figure 001





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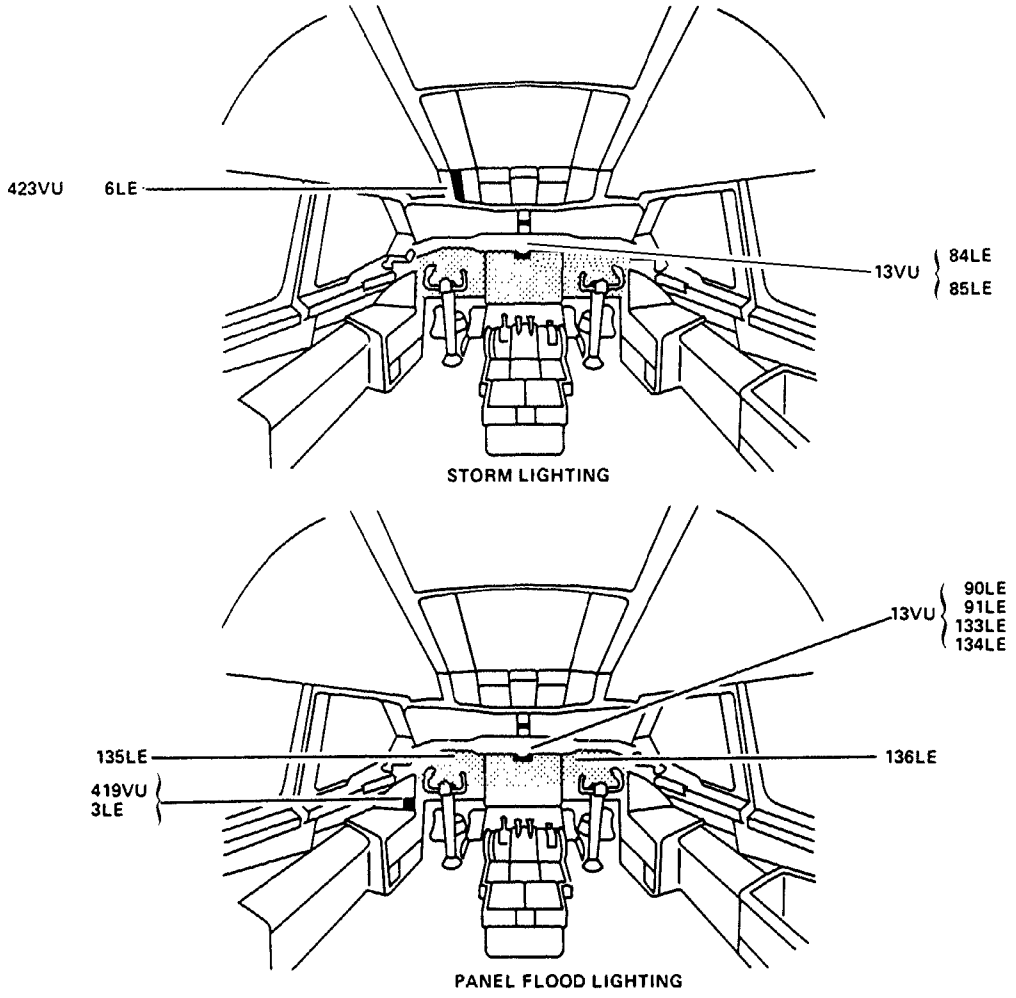
Work Surface Lighting - Component Location
Figure 002



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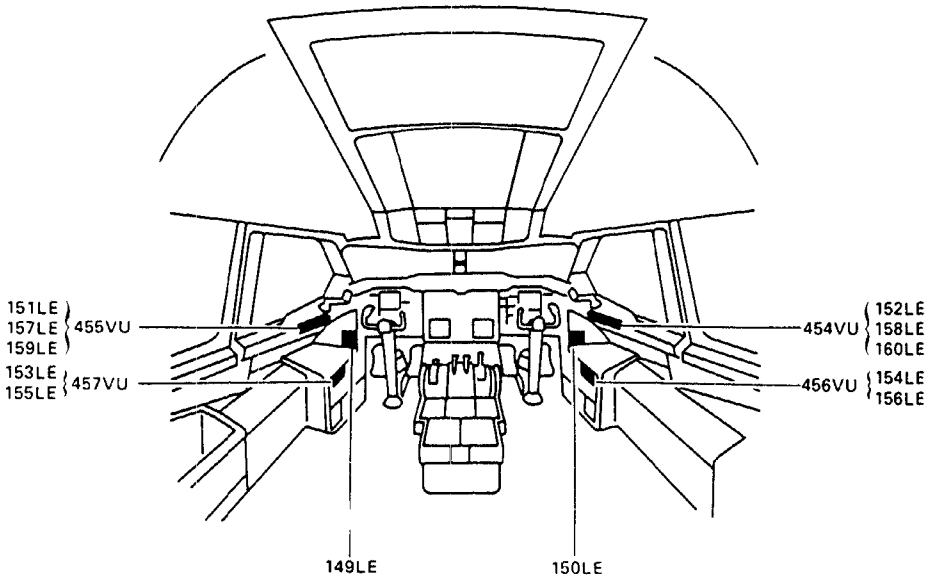
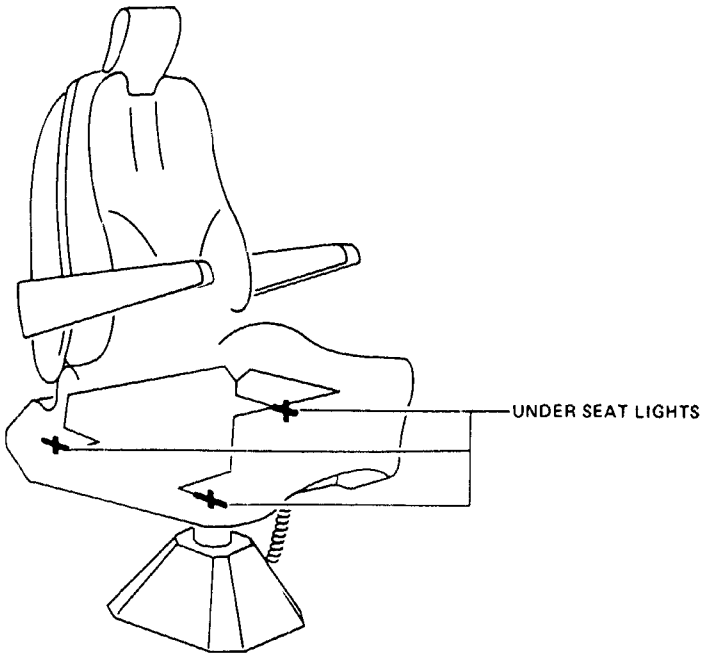
Instrument Panel Lighting - Component Location
Figure 003

R



CONSOLE LIGHTING



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Console and Underseat Lighting - Component Location
Figure 004

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF.
3LE	RHEOSTAT-MAIN INST PNL/FLOOD LT	419VU	211		33-12-24
6LE	SWITCH-STORM/OFF	423VU	211		33-12-22
7LE	SWITCH-BRT/DIM	423VU	211		33-12-12
14LE	SWITCH-DOME	423VU	211		33-12-13
16LE	SWITCH-DOME LIGHT		211		33-12-13
17LE	OUTLET-28VDC, COCKPIT	131VU	212		
23LE	LIGHT-READING, CAPT		211		33-12-35
34LE	LIGHT-READING,F/O		212		33-12-35
51LE	OUTLET-115VAC, COCKPIT	131VU	212		
60LE	RHEOSTAT-READING LT	449VU	211		
61LE	RHEOSTAT-MAP LT, CAPT	419VU	211		
62LE	RHEOSTAT-MAP LT, F/O	420VU	212		
63LE	LIGHT-READING	449VU	211		
80LE	BALLAST-STORM LIGHT		122		33-12-21
84LE	FLUORESCENT TUBE	13VU	210		33-12-26
85LE	FLUORESCENT TUBE	13VU	210		33-12-26
90LE	LIGHT-FLOOD, CENTER INST PNL	13VU	210		33-12-23
91LE	LIGHT-FLOOD, CENTER INST PNL	13VU	210		33-12-23
104LE	RHEOSTAT-READING LT	431VU	211		
107LE	LIGHT-READING	431VU	211		33-12-35
108LE	CHARTHOLDER-F/O CTL WHEEL	14VU	212		
109LE	CHARTHOLDER-CAPT CTL WHEEL	12VU	212		
120LE	LIGHT-EYE REFERENCE BALLS		210		
133LE	LIGHT-FLOOD, CENTER INST PNL	13VU	210		
134LE	LIGHT-FLOOD, CENTER INST PNL	13VU	210		
135LE	LIGHT-FLOOD, CAPT INST PNL		211		
136LE	LIGHT-FLOOD, F/O INST PANEL		212		
145LE	LIGHT-EYE REFERENCE BALLS		210		
146LE	LIGHT-MAP TABLE, F/O		212		
147LE	LIGHT-MAP TABLE, CAPT		211		
149LE	SWITCH-CONSOLE FLOOD LT	419VU	211		
150LE	SWITCH-CONSOLE FLOOD LT	420VU	212		
151LE	LIGHT-UPPER CONSOLE, CAPT	455VU	211		
152LE	LIGHT-UPPER CONSOLE, F/O	454VU	212		
153LE	LIGHT-LOWER CONSOLE, CAPT	457VU	211		
154LE	LIGHT-LOWER CONSOLE, F/O	456VU	212		
155LE	LIGHT-LOWER CONSOLE, CAPT	457VU	211		
156LE	LIGHT-LOWER CONSOLE, F/O	456VU	212		
157LE	LIGHT-UPPER CONSOLE, CAPT	455VU	211		
158LE	LIGHT-UPPER CONSOLE, F/O	454VU	212		
159LE	LIGHT-UPPER CONSOLE, CAPT	455VU	211		
160LE	LIGHT-UPPER CONSOLE, F/O	454VU	212		
161LE	LIGHT-DOME, L	453VU	211		
162LE	LIGHT-DOME, R	452VU	212		
163LE	LIGHT-DOME, L	453VU	211		
164LE	LIGHT-DOME, R	452VU	212		
165LE	LIGHT-DOME, L	453VU	211		
166LE	LIGHT-DOME, R	452VU	212		

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF.
167LE	LIGHT-DOME, L	453VU	211		
168LE	LIGHT-DOME, R	452VU	212		
	LIGHT-UNDERSEAT, CAPT		211		
	LIGHT-UNDERSEAT, F/O		212		

3. Lighting

A. Flight Compartment Lighting
(Ref. Fig. 005)
(Ref. Fig. 006)

(1)Eight dome lights

Illumination of these eight dome lights is controlled by a two-way system including DOME switch located on panel 423VU on the overhead panel and a switch located near the flight compartment door, on the left.
These dome lights provided with captive screws are fitted with long life lamps (about 2000 hours).

(a)Normal operation

In normal operation, the eight dome lights 161LE, 163LE, 165LE, 167LE in zone 211 and 162LE, 164LE, 166LE, 168LE in zone 212 are supplied with 28VDC by the normal busbar 601PP through circuit breaker 57LE located on panel 132VU.
Lighting provided by these dome lights can be dimmed by means of BRT/DIM switch located on panel 423VU on the overhead panel.

(b)Operation in smoke drill procedure

In the event of loss of normal power supply, only dome lights 164LE and 162LE (located on the right at the flight compartment forward section) remain on, being supplied by the ultimate emergency busbar 303PP via circuit breaker 1LE located on panel 22VU and relay 43LE in de-energized position.

(2)Electrical outlets

Two outlets are located on panel 131VU.

(a)A 115VAC/400 Hz outlet (51LE) can provide 1150 watts. It is supplied by the AC busbar 214XP through circuit breaker 50LE.

(b)A 28VDC outlet (17LE) can provide 280 watts. It is supplied by the DC busbar 601PP through circuit breaker 3LS.

B. Work Surface Lighting
(Ref. Fig. 007)
(Ref. Fig. 008)

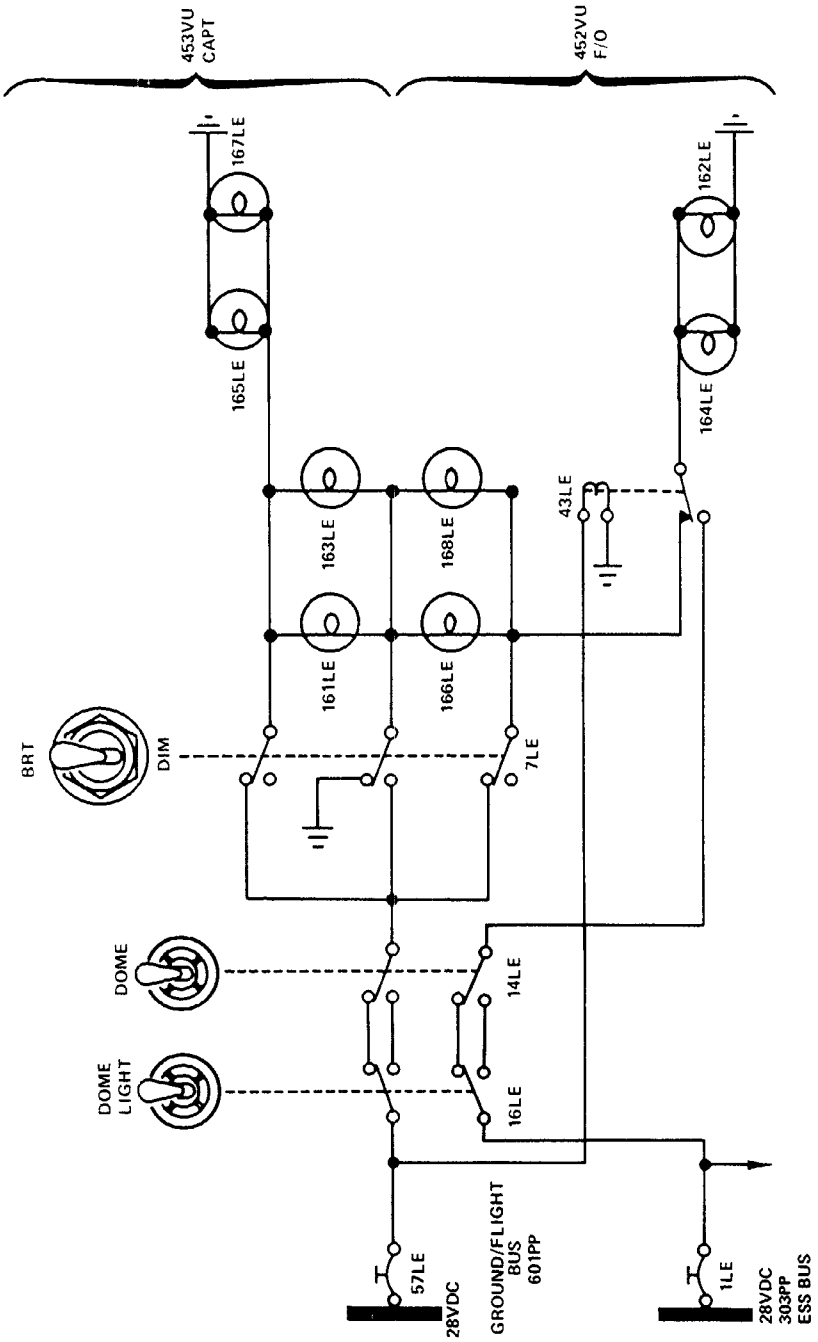
(1)Four direction-adjustable reading lights

(a)Captain's reading light

Captain's reading light 23LE, located in ceiling lining is supplied with 28VDC by busbar 101PP through circuit breaker 4LE located on panel 132VU.
This reading light is provided with a 18W long life lamp.

(b)First Officer's reading light

First Officer's reading light 34LE located in the ceiling lining is supplied with 28VDC by normal busbar 101PP through circuit breaker 52LE



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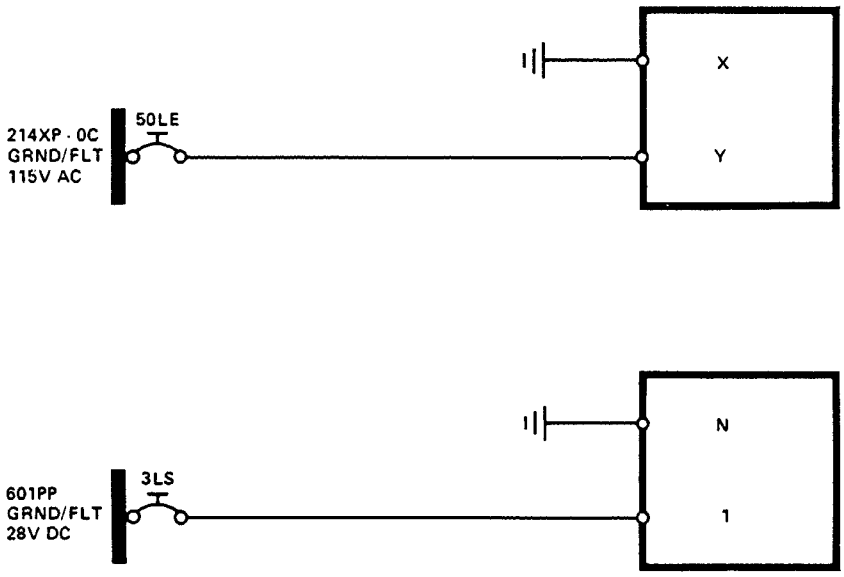
Dome Lights - Schematic Diagram
Figure 005



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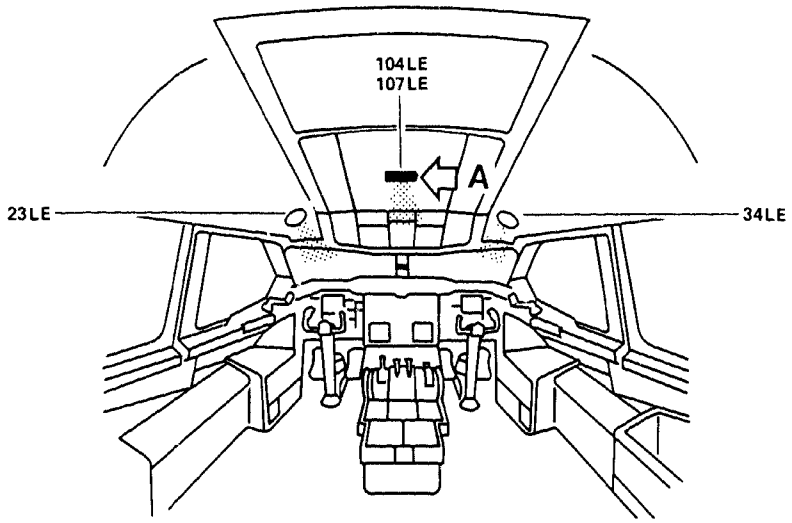
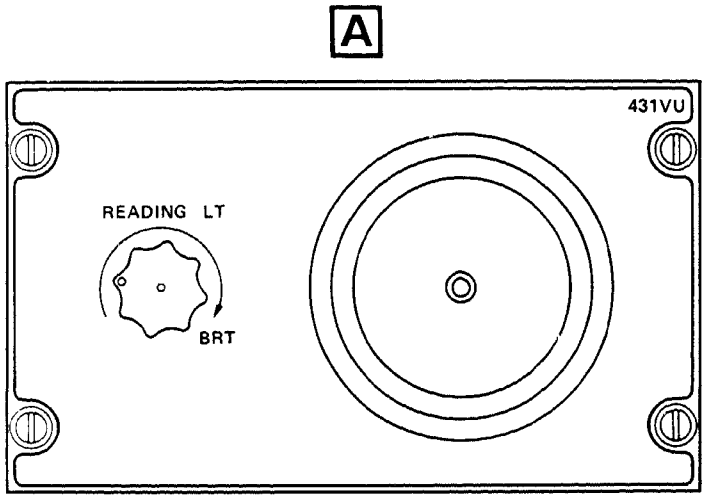
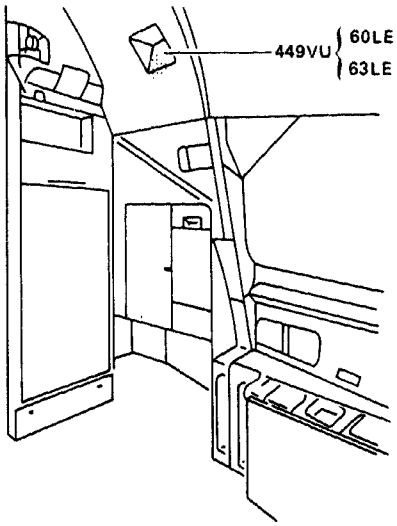
Electrical Outlets - Schematic Diagram
Figure 006







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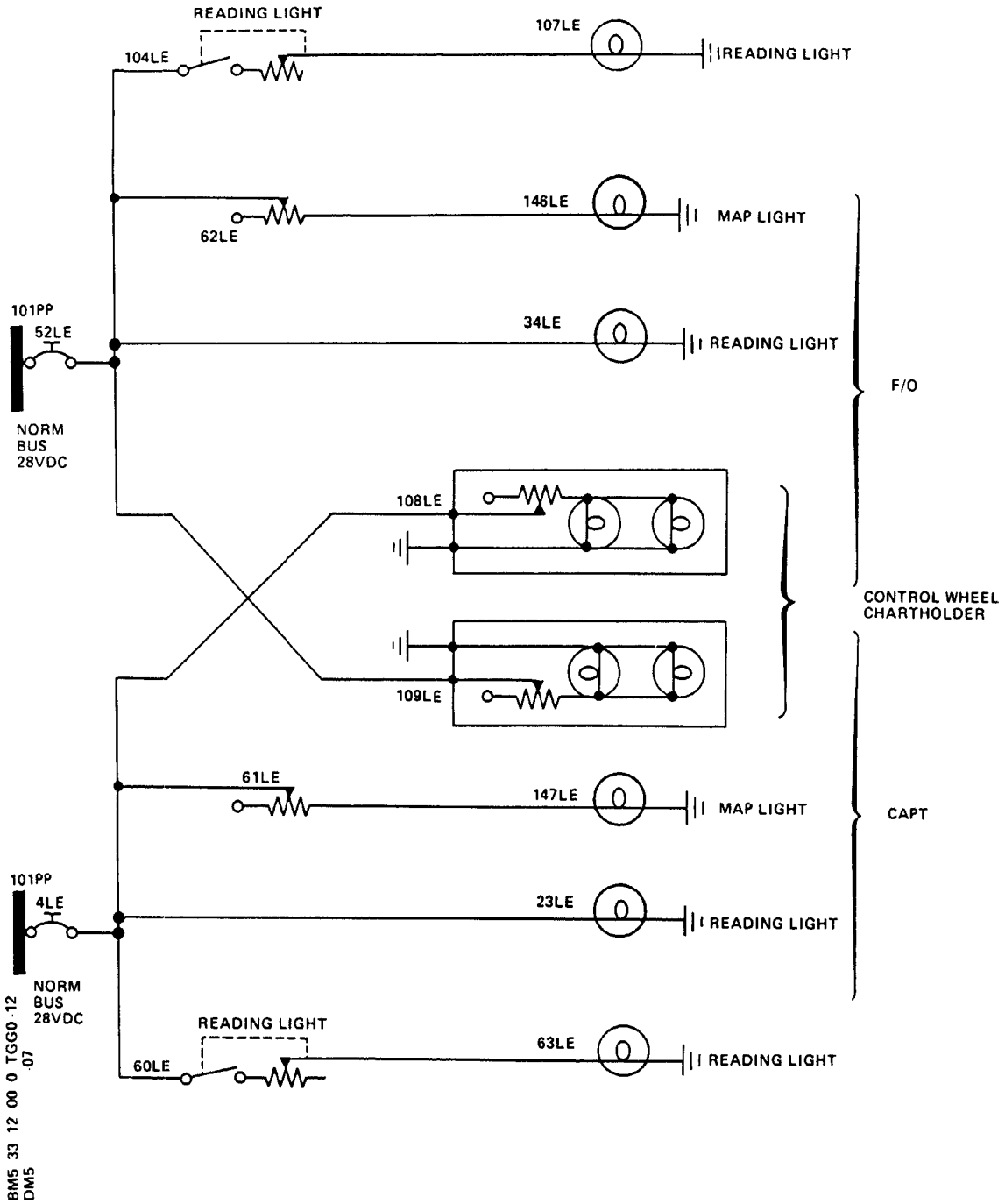
Reading Lights - Component Location
Figure 007



Reading Lights - Schematic Diagram
Figure 008

located on panel 132VU.
This reading light is provided with a long life lamp.

(c)Reading light
Reading light 107LE located on panel 431VU is supplied with 28VDC by the normal busbar 101PP through circuit breaker 52LE located on panel 132VU.
This reading light fitted with a long life lamp is controlled and regulated by READING LT rheostat 104LE located on panel 431VU.
Reading light 63LE located on panel 449VU is supplied with 28VDC by the normal busbar 101 PP through circuit breaker 4LE located on panel 132VU.
This reading light is provided with a long life lamp, controlled by READING LT rheostat 60LE located on panel 449VU.
This rheostat also enables brightness adjustment.

(2)Map table lighting

(a)Captain's map table light 147LE
The map table is installed on the sliding side window panel. It is supplied by the normal busbar 101PP through circuit breaker 4LE located on 132VU. It is controlled and regulated in intensity by MAP LT rheostat 61LE located on panel 419VU.

(b)First Officer's map table light 146LE
This map is installed on the sliding side window panel. It is supplied by the normal busbar 101PP through circuit breaker 52LE.
It is controlled and regulated in intensity by AP LT rheostat 62LE located on panel 420VU.

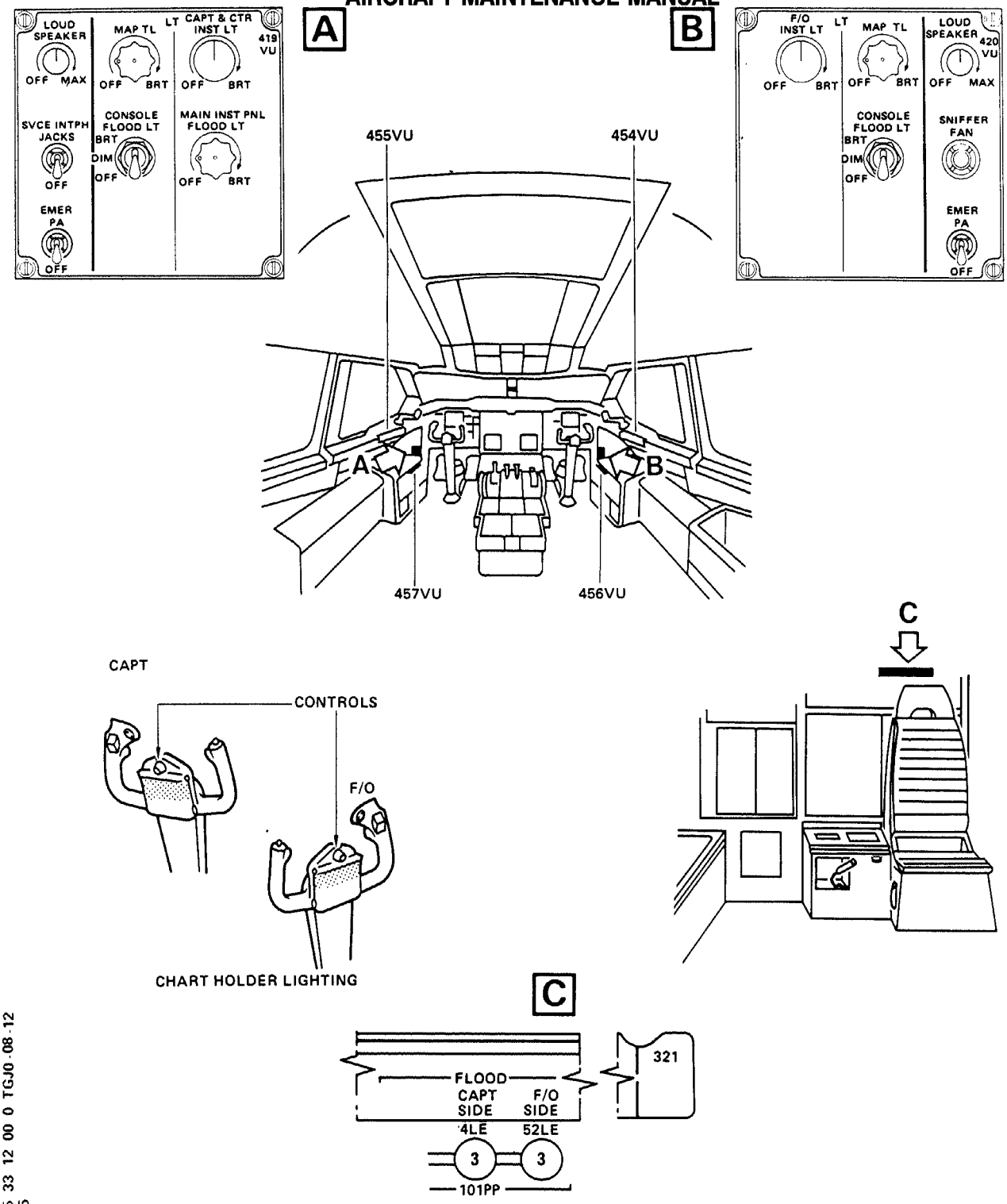
(3)Console and floor lighting
(Ref. Fig. 009)
(Ref. Fig. 010)

(a)Captain's console
The upper console is provided with a strip light ; this strip light is supplied with 28VDC by the normal busbar 101PP through circuit breaker 42LE ; it is controlled by a switch located on panel 419VU.The lower console is provided with two lights. These lights are supplied with 28VDC by the normal busbar 101PP through circuit breaker 42LE ; they are controlled by a switch located on panel 419VU.

(b)First Officer's console
The upper console is provided with a strip light. This strip light is supplied with 28VDC by the normal busbar 101PP through circuit breaker 42LE ; it is controlled by a switch located on panel 420VU. The lower console is provided with two lights. These lights are supplied with 28VDC by the normal busbar 101PP through circuit breaker 42LE ; they are controlled by a switch located on panel 420VU.

(c)Floor lighting
The floor lighting is provided with six lights located under Captain and First Officer seats. They are supplied with 28VDC by the normal busbar 101PP through circuit breaker 42LE ; they are controlled by CONSOLE FLOOD LT switches 149LE and 150LE located on panels 419VU and 420VU.

(4)Captain's and First Officer's control wheel chartholder lighting
Each chartholder is provided with two 4.8 W lamps and controlled by a built-in 125 Ω, 12.5 W rheostat.



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Control Wheel Chartholder Lighting/
Console and Floor Lighting - Component Location
Figure 009

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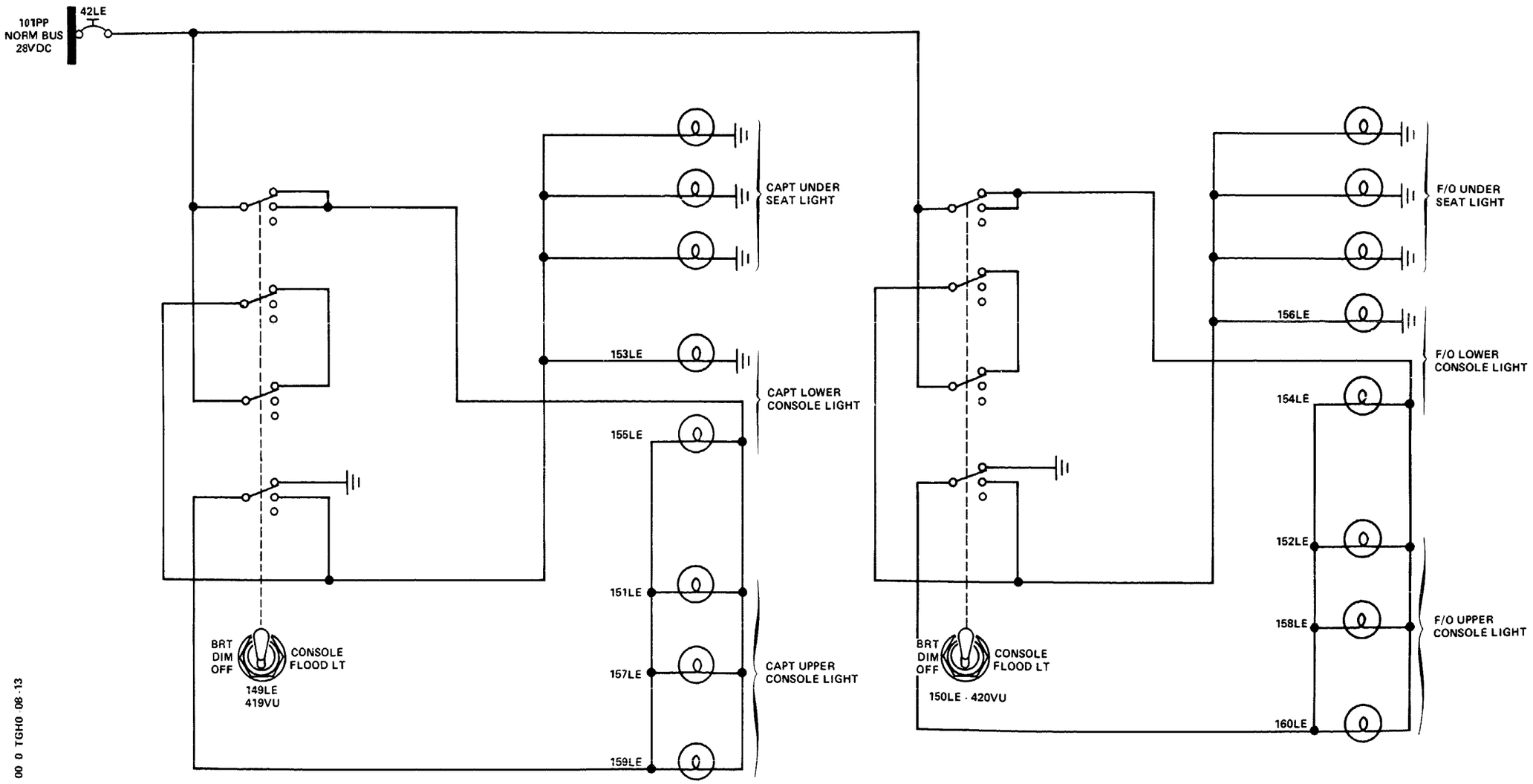

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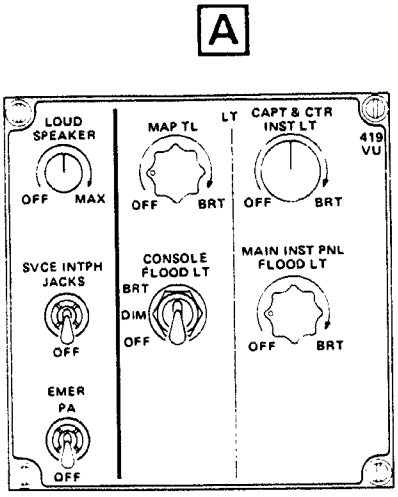
Console and Floor Lighting - Schematic Diagram
Figure 010

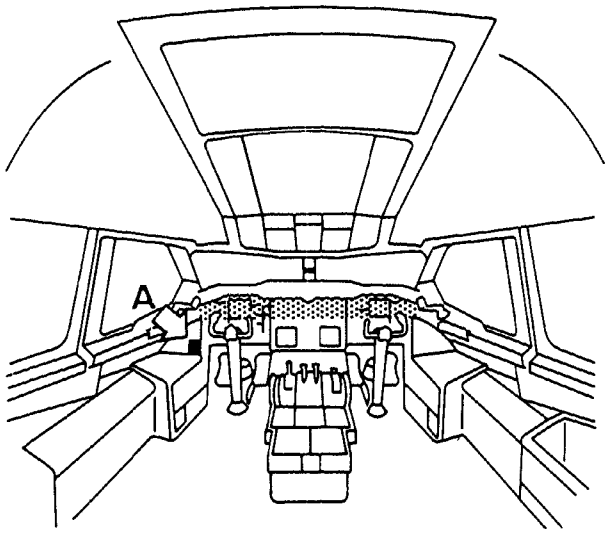
The Captain's control wheel chartholder 109LE is supplied with 28VDC by the busbar 101PP through circuit breaker 52LE.
The First Officer's control wheel chartholder 108LE is supplied with 28VDC by the busbar 101PP through circuit breaker 4LE.

C. Instrument Panel Ambient Lighting
(Ref. Fig. 011)
(Ref. Fig. 012)
Captain's, center, First Officer's instrument panel ambient lighting is of the incandescent and variable type.
(1)Normal operation
Instrument panel ambient lighting is composed of :
- four lamps located under glareshield and above center instrument panel. A hinged mask allows the panel instruments to be lighted without dazzling crew members.
- two miniature flood lights provided with a dimmer cap.

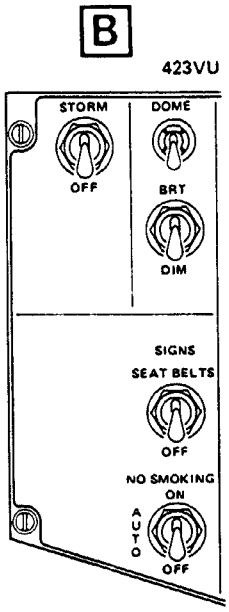
They are located near panels 419VU and 420VU.
This ambient lighting is controlled by a single-controlled 25 watt dual rheostat (2 x 68 Ω) (FLOOD LT). It is located on panel 419VU, on the left of Captain's instrument panel. Each rheostat controls a miniature flood light and two lamps.
Long-life 4.8 watt lamps are supplied via energized contacts of relay 43LE.
Both lamps and the miniature flood light at Captain's instrument panel side, are supplied by the ultimate emergency busbar 303PP through circuit breaker 1LE.
Both lamps and the miniature flood light, at First Officer's instrument panel side, are supplied by the normal busbar 601PP through circuit breaker 57LE.
(2)Ultimate emergency operation
In case of loss of normal busbar power supply, relay 43LE is no longer energized.
Only both lamps and the miniature flood light at Captain's instrument panel side, are supplied with a regulated intensity (resistor) by circuit breaker 1LE through de-energized contacts of relay 43LE.

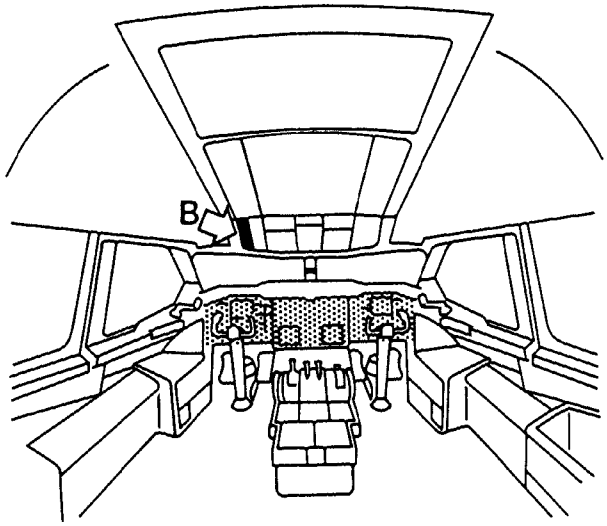
D. Storm Lighting
In case of bad weather conditions (storms) this lighting provides an intense brightness to instrument panels.
It comprises :
- two fluorescent tubes (6 watts) supplied through ballast 80LE with 115 V/400 Hz by the busbar 202XP and circuit breaker 58LE.
These two fluorescent tubes are located under glareshield and above center instrument panel.
On the overhead panel, on panel 423VU, STORM/OFF switch (6LE) controls illumination of both fluorescent tubes and of ambient lighting of instrument panels. This lighting is intense, without possibility of adjustment.





CAPT LIGHTING/LOUDSPEAKER PANEL





STORM LIGHTING

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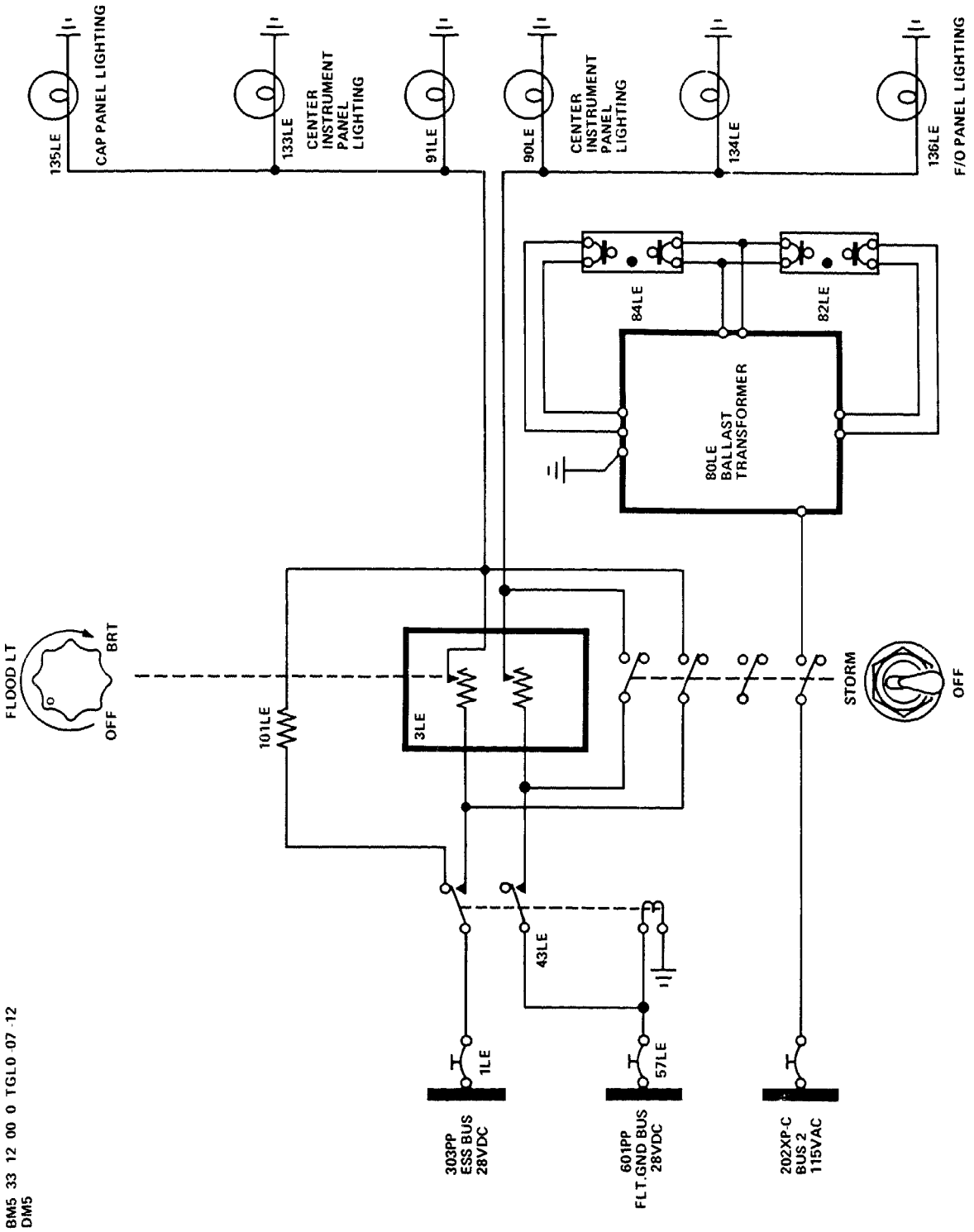
Instrument Panel Ambient Lighting - Component Location
Figure 011



Instrument Panel Ambient Lighting - Schematic Diagram
Figure 012

1. Operational Test

A. Reason for the Job
To check correct operation of general illumination in flight compartment.

B. Equipment and Materials

ITEM	DESIGNATION
(1)	AC/DC Voltmeter (115VAC/28VDC)
Referenced Procedure - 24-41-00, P. Block 301	AC External Power Control

C. Procedure
(1)Job set-up
(a)Energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(b)Make certain that electronics racks ventilation is correct.
(c)Make certain that the following circuit breakers are closed :

PANEL	SERVICE	IDENT.	LOCATION
22VU	EMER LT/CAPT PNL/FLOOD & /DOME	1LE	205/E25
132VU	LIGHTING/INT LT/FLOOD/CAPT/SIDE	4LE	321/P77
132VU	LIGHTING/INT LT/FLOOD/PED & /OVHD	42LE	321/P76
132VU	LIGHTING/115VAC/OUTLETS/COCKPIT &/ AVNCS/COMPT	50LE	325/K80
132VU	LIGHTING/INT LT/FLOOD/F/O/SIDE	52LE	321/P78
132VU	LIGHTING/DOME	57LE	325/K81
132VU	LIGHTING/INT LT/STORM	58LE	323/M84
132VU	LIGHTING/28VDC OUTLETS/COCKPITS &/ AVNCS/COMPT	3LS	321/N85

(2)Dome light test

ACTION	RESULT
1. On panel 423VU - place **DOME** switch in upper position - place **BRT/DIM** switch in **BRT** position	
2. At entrance to flight compartment - place **DOME LT** switch in upper position	In zone 211-212 - the eight dome lights come on with maximum brightness
3. On panel 423VU - place **DOME LT** switch in lower position	- the eight dome lights go off

ACTION	RESULT
4. At entrance to flight compartment - place **DOME LT** switch in lower position	- the eight dome lights come on with maximum brightness
5. On panel **423VU** - place **DIM/BRT** switch in **DIM** position - place **DIM/BRT** switch in **BRT** position	- the eight dome lights dim
6. On panel **132VU,** - open **LIGHTING/DOME** circuit breaker **57LE (325/K81)** - close circuit breaker **57LE**	- Dome lights **164LE** and **162LE** come on with maximum brightness - the eight dome lights come on with maximum brightness
7. On panel **423VU,** place **DOME LT** switch in upper position	The eight dome lights go off

(3)Main instrument panel light test

ACTION	RESULT
1. On panel **419VU** - gradually turn **FLOOD LT** rheostat from **OFF** to **BRT** position then from **BRT** to **OFF** position	On Captain, First Officer and center instrument panels - lights gradually brighten to maximum intensity, then dim until they go off
2. On panel **423VU** - place **STORM/OFF** switch in **STORM** position - place **STORM/OFF** switch in **OFF** position	On Captain, First Officer and center instrument panels - fluorescent tubes and lights come on with maximum brightness. - fluorescent tubes go off.
3. On panel **132VU** - Open **LIGHTING/DOME** circuit breaker **57LE (325/K81)** - close circuit breaker **57LE**	On Captain and center instrument panels, the three lights come on with reduced intensity On Captain, First Officer and center instrument panel the six light brightness varies according to **FLOOD LT** rheostat position

(4)Flood light and individual reading light test
(Console, Map table, Chart Holder, Seat)

ACTION	RESULT
1.	- F/O reading light and Captain reading light are illuminated
2. On panel 419VU - gradually turn **CAPT MAP LT** rheostat from **OFF** to **BRT** position and then from **BRT** to **OFF** position - place **CONSOLE FLOOD** switch in **BRT** position	In zone 211 - map table light gradually brightens to maximum intensity then dims until it goes off. - the three lights under Captain's seat, the two console lower lights and the three console upper lights come on with maximum brightness
- place **CONSOLE FLOOD** switch in **DIM** position	- the eight lights come on with reduced intensity
- place **CONSOLE FLOOD** switch in **OFF** position	- the eight lights go off.
3. On panel 12VU - gradually turn **CAPT CHART HOLDER** rheostat from **OFF** to **BRT** position then from **BRT** to **OFF** position	On panel 12VU - Captain chartholder lights brighten to maximum intensity then dim until they go off
4. On panel 14VU - gradually turn **F/O CHART HOLDER** rheostat from **OFF** to **BRT** position then from **BRT** to **OFF** position	On panel 14VU - First Officer chart holder lights brighten to maximum intensity then dim until they go off
5. On panel 420VU - gradually turn **F/O MAP LT** rheostat from **OFF** to **BRT** position and then from **BRT** to **OFF** position	In zone 212 - map table light gradually brightens to maximum intensity then dims until it goes off
- place **CONSOLE FLOOD** switch in **BRT** position	- the three lights under First Officer's seat, the two lower console lights and the three console upper lights come on with maximum brightness
- place **CONSOLE FLOOD** switch in **DIM** position	- the eight lights come on with reduced intensity
- place **CONSOLE FLOOD** switch in **OFF** position	- the eight lights go off.
6. On panel 431VU - gradually turn 3rd **READING LT** rheostat from **OFF** to **BRT** position	In zone 211 - 3rd reading light gradually brightens to maximum intensity

ACTION	RESULT
then from BRT to OFF position	then dims until it goes off
7. On panel 449VU - gradually turn 4th READING LT rheostat from OFF to BRT position then from BRT to OFF position.	In zone 211 - 4th reading light gradually brightens to maximum intensity then dims until it goes off.
8. On panel 436VU - place STBY COMPASS switch in EYE REF position	In zone 210 - the eye reference lights come on
9. On panel 131VU - voltage at terminals of outlet 51LE is 115V/400 Hz - voltage at terminals of outlet 17LE is 28VDC	

R (5)Close-up

(a)De-energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).

(b)Restore system and aircraft to normal operating condition.

(c)Remove all ground handling and maintenance equipment, standard and special tools, together with ground power equipment all access equipment and miscellaneous items.

1. Maintenance Procedure

A. Reason for the Job

Ref : MMEL Sect. 1-33, Item 1)

B. Equipment and Materials

ITEM	DESIGNATION
A.	Circuit Breaker Safety Clips
Referenced Procedures - 24-41-00, P. Block 301	AC External Power Control

C. Procedure

(1)Job set-up

(a)Energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).

(b)Make certain that electronics racks ventilation is correct.

(c)On circuit breaker panel 132VU, make certain that the circuit breaker 1LF is closed.

(d)On panel 22VU, make certain that the circuit breaker 27FN1 is closed.

(2)Preparation for the test

(a)On overhead panel 423VU:

1 Place DOME switch 14LE in on position.

NOTE : BRT/DIM switch may be placed in either BRT or DIM position.

(b)On circuit breaker panel 132VU:

1 Open circuit breaker 57LE, row/col K81, DOME.

(c)On the forward RH dome:

1 Observe that the right dome lights 162LE and 164LE come on and remain illuminated.

(d)On glareshield (at CAPT instrument panel side):

1 Observe that miniature flood light 135LE comes on and remains illuminated.

(e)On glareshield (above center instrument panel):

1 Observe that flood lights 91LE and 133LE come on and remain illuminated.

(f)On circuit breaker panel 132VU:

1 Close circuit breaker 57LE, row/col K81, DOME.

(g)On overhead panel 423VU:

1 Set DOME and BRT/DIM switches as required.

(3)Check of the standby horizon integrated lighting
(a)Test

ACTION	RESULT
1. On panel 419VU, turn CAPT & CTR INST LT rheostat from OFF to BRT position.	The light intensity of all instruments associated to this rheostat including standby horizon indicator varies with position of rheostat.
2. On panel 419VU, turn CAPT & CTR INST LT rheostat to OFF position.	On standby horizon indicator, light intensity is minimum.
3. On panel 132VU, open circuit breaker 1LF.	On standby horizon indicator, light intensity is maximum.
4. On panel 419VU, turn CAPT & CTR INST LT rheostat from OFF to BRT and from BRT to OFF position.	On standby horizon indicator, light intensity does not vary.
5. On panel 132VU, close circuit breaker 1LF.	After a few seconds, on standby horizon indicator, light intensity is minimum.
6. On panel 419VU, turn CAPT & CTR INST LT rheostat from OFF to BRT position.	The light intensity of all instruments associated to this rheostat including standby horizon indicator varies with position of rheostat.

(4)Close-up
(a)De-energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(b)Restore system and aircraft to normal operating system.

DOME LIGHTS - REMOVAL/INSTALLATION

1. Reason for the Job

A. Removal/Installation of dome light (161LE, 162LE, 163LE, 164LE, 165LE, 166LE, 167LE, 168LE).

2. Equipment and Materials

ITEM	DESIGNATION
A.	Circuit Breaker Safety Clips
B.	Torque Wrench, 0 to 2 m.daN (0 to 177 lbf. in.)
Referenced Procedure - 24-41-00, P. Block 301	AC External Power Control

3. Procedure
(Ref. Fig. 401)

A. Job Set-Up
(1)Open, safety and tag the following circuit breaker :

PANEL	SERVICE	IDENT.	LOCATION
132VU	DOME	57LE	325/K81

B. Removal

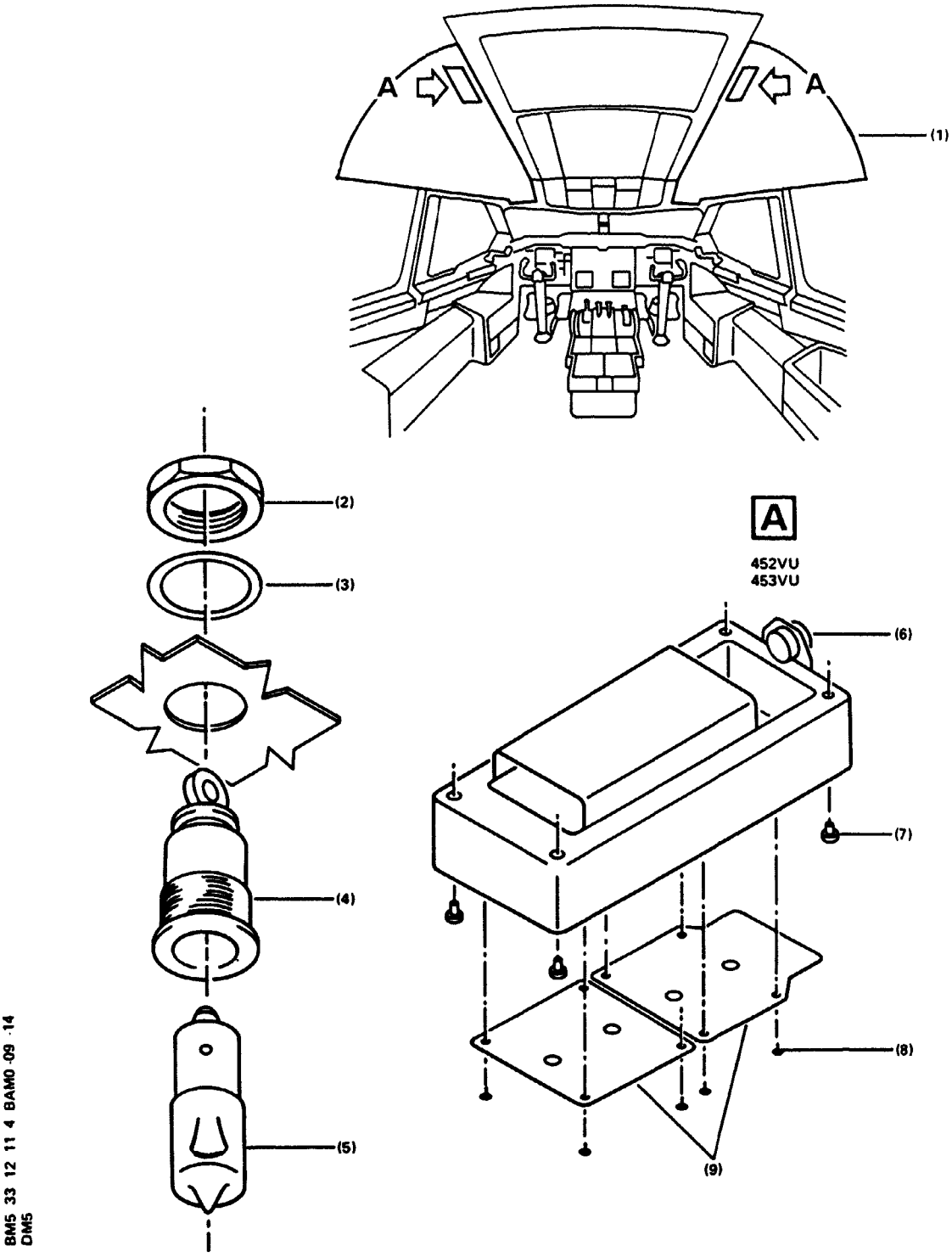
R CAUTION : DO NOT TOUCH THE LAMP GLASS WITH YOUR FINGERS.
R THE OILS FROM YOUR SKIN WILL QUICKLY CAUSE DETERIORATION OF THE
R LAMP.
R IF YOU ACCIDENTALLY TOUCH THE LAMP GLASS, CLEAN IT WITH A
R LINT-FREE CLOTH.

(1)Remove ceiling funishing panel (1).
(2)Remove bulb (5).
(3)Disconnect electrical connector (6).
(4)Remove the 4 screws (7) attaching dome light.
(5)Remove the 8 screws (8) attaching plates (9).
(6)Disconnect wires.
(7)Remove nut (2) and lock washer (3).
(8)Remove light body (4).

C. Installation

R CAUTION : DO NOT TOUCH THE LAMP GLASS WITH YOUR FINGERS.
R THE OILS FROM YOUR SKIN WILL QUICKLY CAUSE DETERIORATION OF THE
R LAMP.
R IF YOU ACCIDENTALLY TOUCH THE LAMP GLASS, CLEAN IT WITH A
R LINT-FREE CLOTH.

(1)Install light body (4).
(2)Install lock washer (3) and nut (2).
(3)Connect wires.



Flight Compartment Dome Lights
Figure 401

(4)Install plates (9) using the 8 screws (8).
(5)Install dome light using the 4 screws (7).
(6)Connect electrical connector (6).
(7)Install bulb (5).
(8)Install ceiling furnishing panel (1).

D. Test
(1)Initial conditions
- correct electrical power supply
- forward services ventilation system in operation
(2)Remove safety clip and tag and close circuit breaker 57LE.
(3)Place DOME LIGHT switch on flight compartment left wall in up position.
(4)Place DOME switch on panel 423VU in up position.
(5)Make certain that replacement light comes on.
(6)Place DOME switch on panel 423VU or at entrance to flight compartment in down position
(7)Make certain that replacement light goes off

E. Close-Up
(1)Check that working area is clean and clear of tools and miscellaneous items of equipment.
(2)De-energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).

CONSOLE LIGHTING - REMOVAL/INSTALLATION

1. Reason for the Job
   Removal/Installation of Captain and First Officer Console Lights (151LE to 160LE)

2. Equipment and Materials

ITEM	DESIGNATION
A.	Circuit Breaker Safety Clips
Referenced Procedure - 24-41-00, P. Block 301	AC External Power Control

3. Procedure
   (Ref. Fig. 401)

A. Job Set-Up
(1)Open, safety and tag the following circuit breaker :

PANEL	SERVICE	IDENT.	LOCATION
132VU	LIGHTING/INT.LT/FLOOD/PED &/OVHD	42LE	321/P76

B. Removal

R CAUTION : DO NOT TOUCH THE LAMP GLASS WITH YOUR FINGERS.
R THE OILS FROM YOUR SKIN WILL QUICKLY CAUSE DETERIORATION OF THE
R LAMP.
R IF YOU ACCIDENTALLY TOUCH THE LAMP GLASS, CLEAN IT WITH A
R LINT-FREE CLOTH.

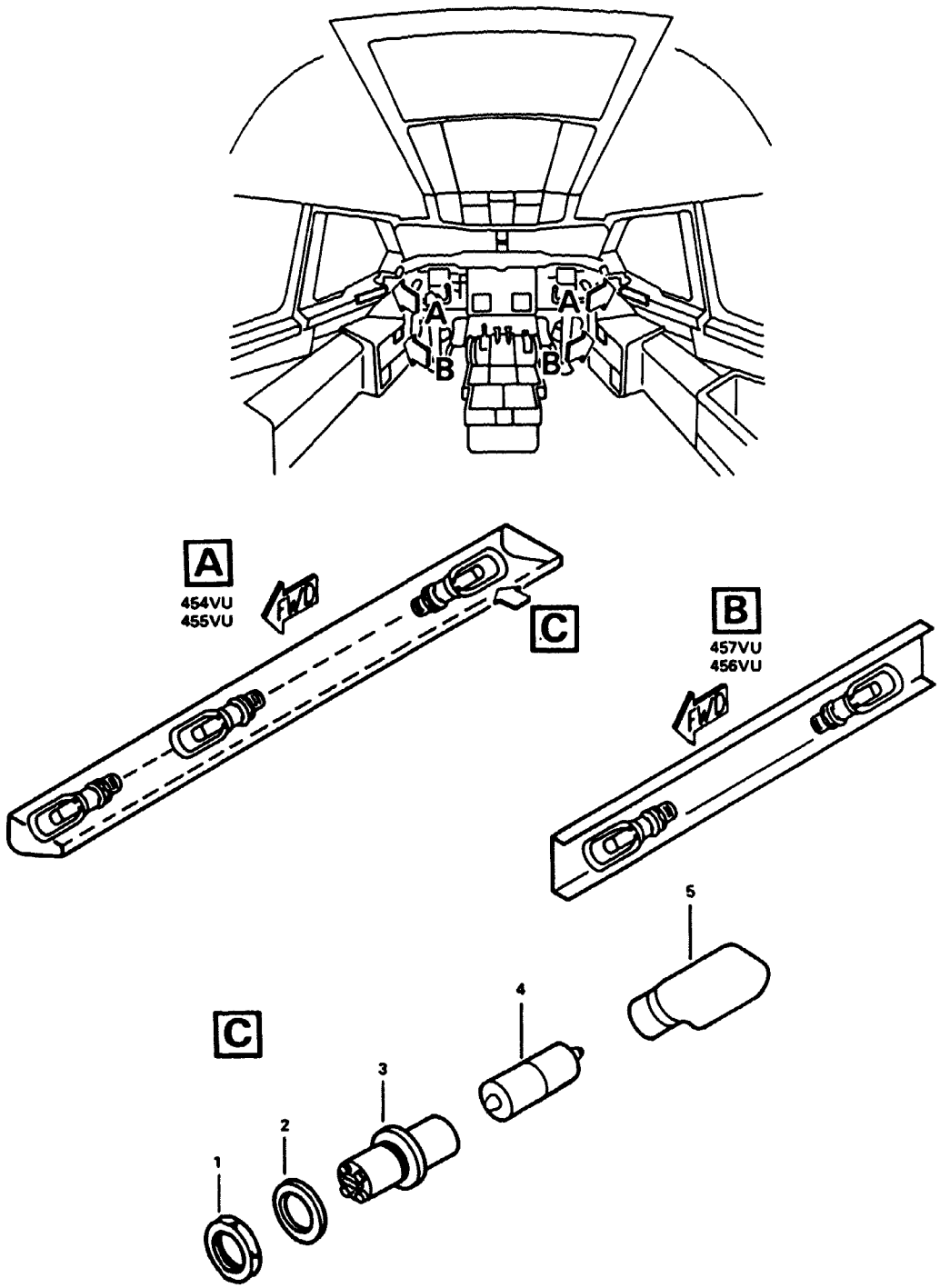
(1)Remove housing (5).
(2)Remove bulb (4).
(3)Disconnect electrical connector.
(4)Remove attachment nut (1) from light body.
(5)Remove lock washer (2).
(6)Remove light body (3).

C. Installation

R CAUTION : DO NOT TOUCH THE LAMP GLASS WITH YOUR FINGERS.
R THE OILS FROM YOUR SKIN WILL QUICKLY CAUSE DETERIORATION OF THE
R LAMP.
R IF YOU ACCIDENTALLY TOUCH THE LAMP GLASS, CLEAN IT WITH A
R LINT-FREE CLOTH.

(1)Install light body (3).
(2)Install lock washer (2).
(3)Install nut (1).
(4)Connect electrical connector.
(5)Install bulb (4).
(6)Install housing (5).

D. Test



Captain, First Officer Upper and Lower Console Lights
Figure 401

(1)Energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(2)Remove safety clip and tag and close circuit breaker 42LE.
(3)On panel 419VU (420VU), place CONSOLE FLOOD LIGHT switch in BRT position.
(4)Check that replacement light comes on.
(5)On panel 419VU (420VU), place CONSOLE FLOOD LIGHT switch in OFF position.

E. Close-Up
(1)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(2)De-energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).

READING AND MAP TABLE LIGHTS - SERVICING

1. Reason for the Job

A. Removal/Installation of an Adjustable Light Bulb in Flight Compartment (23LE, 34LE, 63LE, 107LE, 146LE, 147LE).

2. Equipment and Materials

ITEM	DESIGNATION
A.	Circuit Breaker Safety Clips
Referenced Procedure - 24-41-00, P. Block 301	AC External Power Control

3. Procedure

A. Job Set-Up

(1)Open, safety and tag the following circuit breakers :

PANEL	SERVICE	IDENT.	LOCATION
132VU	INT LT/FLOOD/CAPT/SIDE	4LE	321/P77
132VU	INT LT/FLOOD/F/O/SIDE	52LE	321/P78

B. Removal/Installation of Captain and First Officer Reading Lights (23LE and 34LE)
(Ref. Fig. 301)

(1)Removal

R CAUTION : DO NOT TOUCH THE LAMP GLASS WITH YOUR FINGERS.
R THE OILS FROM YOUR SKIN WILL QUICKLY CAUSE DETERIORATION OF THE
R LAMP.
R IF YOU ACCIDENTALLY TOUCH THE LAMP GLASS, CLEAN IT WITH A
R LINT-FREE CLOTH.

(a)Remove cover (2) by turning to the left.
(b)Remove bulb (1) from socket.

(2)Installation

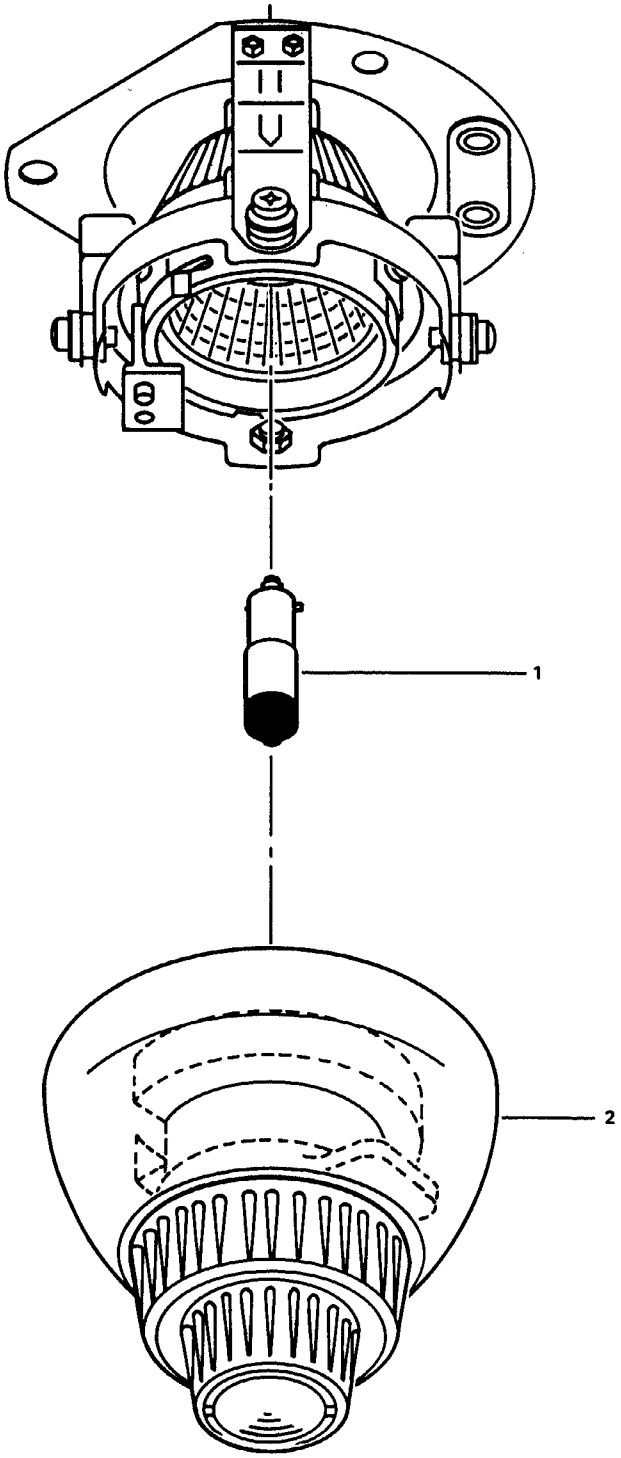
R CAUTION : DO NOT TOUCH THE LAMP GLASS WITH YOUR FINGERS.
R THE OILS FROM YOUR SKIN WILL QUICKLY CAUSE DETERIORATION OF THE
R LAMP.
R IF YOU ACCIDENTALLY TOUCH THE LAMP GLASS, CLEAN IT WITH A
R LINT-FREE CLOTH.

(a)Install bulb (1) in socket.
(b)Install cover (2).

(3)Test

(a)Energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(b)Remove safety clips and tags and close circuit breakers 4LE and 52LE.
(c)Check that replacement lamp comes on.

C. Removal/Installation of Reading and Map Table Lights (63LE, 107LE, 146LE, 147LE)



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Captain and First Officer Reading Light - Bulb Replacement.
Figure 301

(Ref. Fig. 302)

(1)Removal

R CAUTION : DO NOT TOUCH THE LAMP GLASS WITH YOUR FINGERS.
R THE OILS FROM YOUR SKIN WILL QUICKLY CAUSE DETERIORATION OF THE
R LAMP.
R IF YOU ACCIDENTALLY TOUCH THE LAMP GLASS, CLEAN IT WITH A
R LINT-FREE CLOTH.

(a)Remove lens (3) from housing (1) by means of a screwdriver.

(b)Remove bulb (2) from socket.

(2)Installation

R CAUTION : DO NOT TOUCH THE LAMP GLASS WITH YOUR FINGERS.
R THE OILS FROM YOUR SKIN WILL QUICKLY CAUSE DETERIORATION OF THE
R LAMP.
R IF YOU ACCIDENTALLY TOUCH THE LAMP GLASS, CLEAN IT WITH A
R LINT-FREE CLOTH.

(a)Install bulb (1) in socket.

(b)Install cover (2).

(3)Test

(a)Energize the aircraft electrical network (Ref. 24-41-00. P. Block 301).

(b)Remove safety clips and tags and close circuit breakers 4LE and 52LE.

(c)Turn READING LT rheostat progressively to maximum BRT position

- READING LT rheostat 104LE on panel 431VU for reading light 107LE.
- READING LT rheostat 60LE on panel 449VU for reading light 63LE.
- MAP LT rheostat 61LE on panel 419VU for CAPT map table light 147LE.
- MAP LT rheostat 62LE on panel 449VU for F/O map table light 146LE.

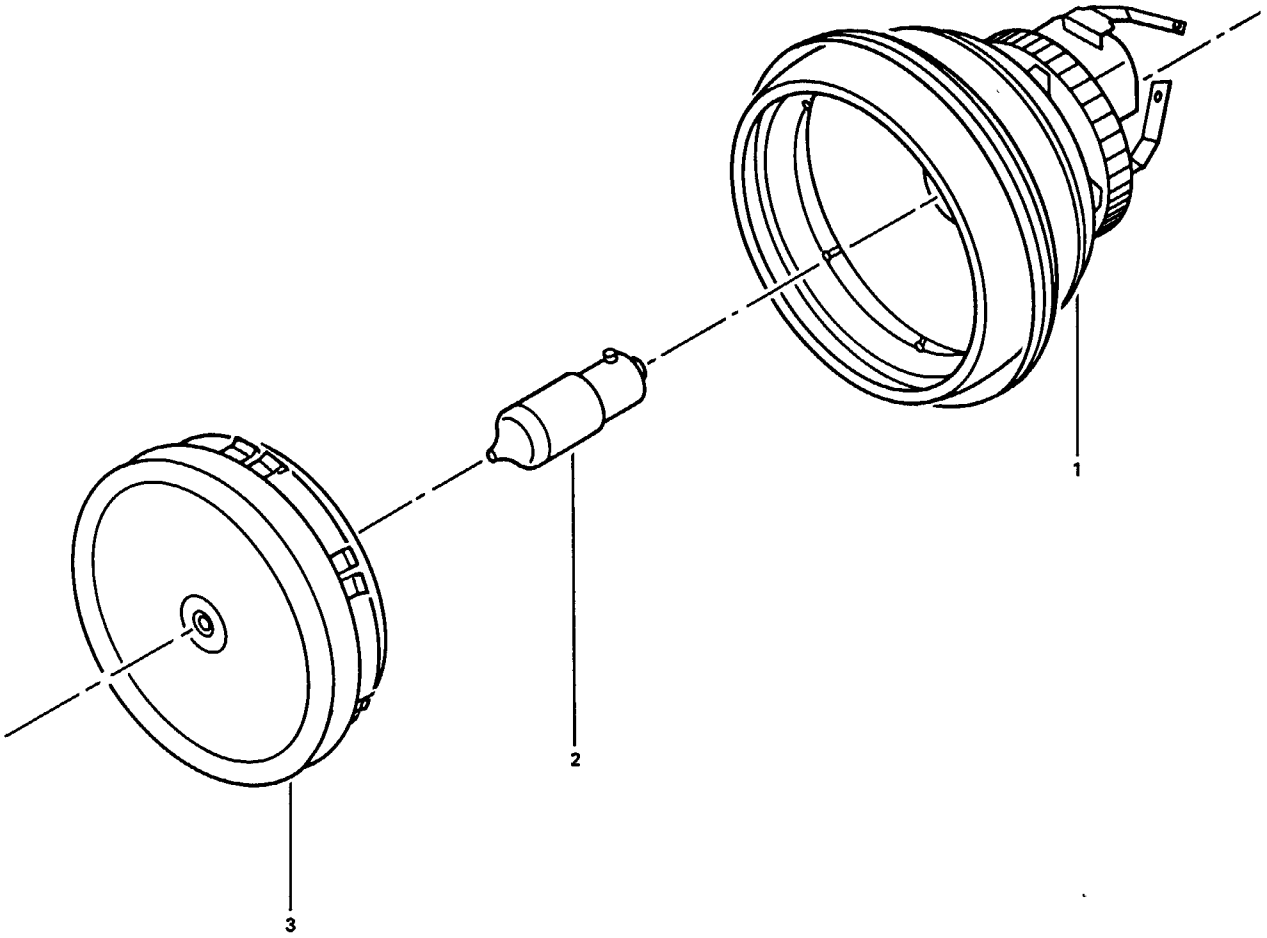
(d)Check that replacement lamp comes on.

(e)Turn rheostat to minimum position.

D. Close-Up

(1)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.

(2)De-energize the aircraft electrical network.



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Reading and Map Table Lights (63LE, 107LE, 146LE. 147LE)
Figure 302

READING AND MAP TABLE LIGHTS - REMOVAL/INSTALLATION

1. Reason for the Job
Removal/Installation of Reading and Map Table Lights in Flight Compartment (23LE, 34LE, 63LE, 107LE, 146LE, 147LE).

2. Equipment and Materials

ITEM	DESIGNATION
A.	Circuit Breaker Safety Clips
Referenced Procedure - 24-41-00, P. Block 301	AC External Power Control

3. Procedure

A. Job Set-Up
(1)Open, safety and tag the following circuit breakers :

PANEL	SERVICE	IDENT.	LOCATION
132VU	IN LT/FLOOD/CAPT/SIDE	4LE	321/P77
132VU	INT LT/FLOOD/F/O/SIDE	52LE	321/P78

B. Removal/Installation of Captain and First Officer Reading Lights (23LE and 34LE)
(Ref. Fig. 401)
(1)Removal

R CAUTION : DO NOT TOUCH THE LAMP GLASS WITH YOUR FINGERS.
R THE OILS FROM YOUR SKIN WILL QUICKLY CAUSE DETERIORATION OF THE
R LAMP.
R IF YOU ACCIDENTALLY TOUCH THE LAMP GLASS, CLEAN IT WITH A
R LINT-FREE CLOTH.

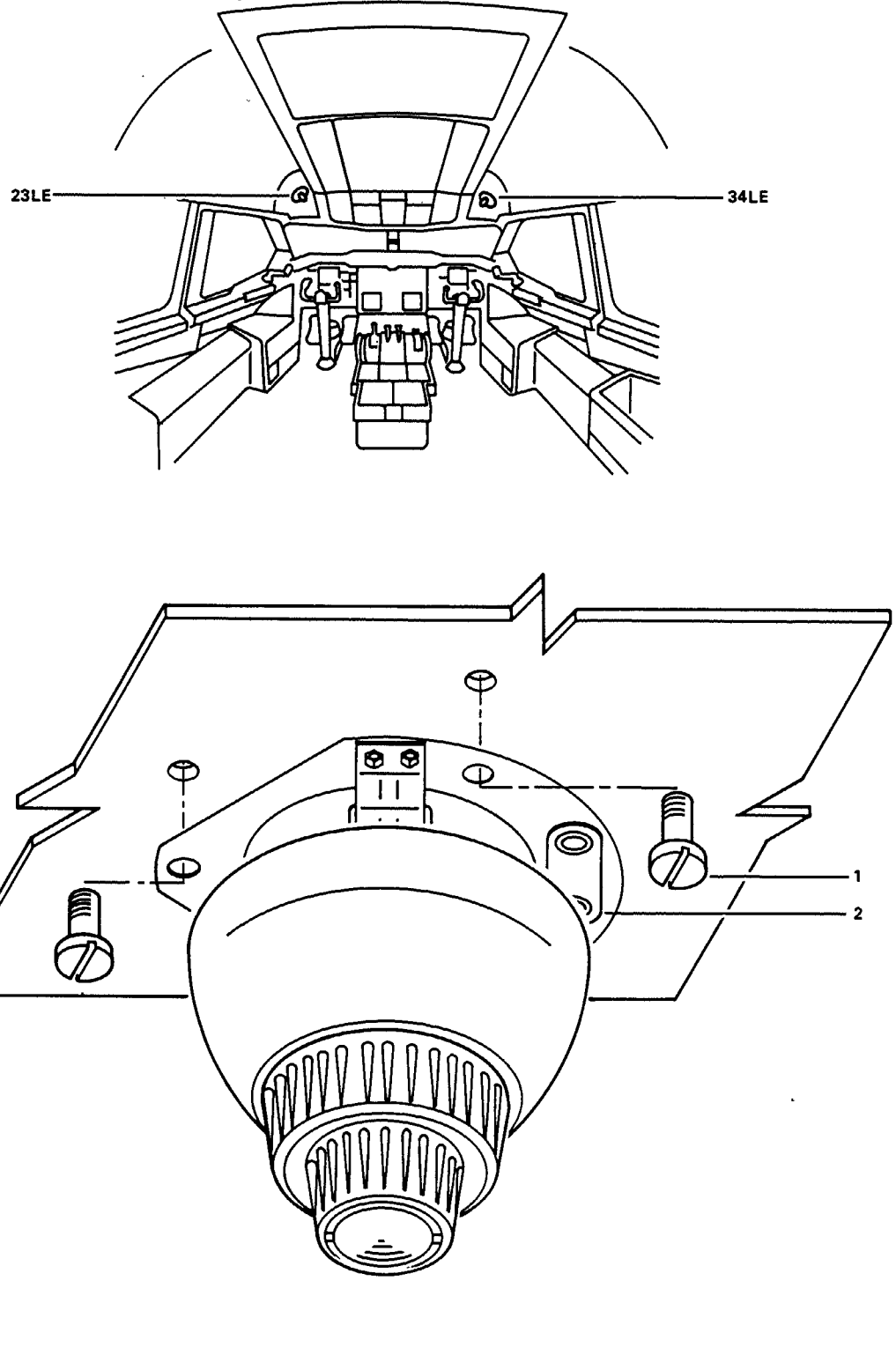
(a)Remove furnishing panel from corresponding Captain and First Officer reading lights.
(b)Remove the three screws (1) from reading light support (2).
(c)Disconnect electrical connector.

(2)Installation

R CAUTION : DO NOT TOUCH THE LAMP GLASS WITH YOUR FINGERS.
R THE OILS FROM YOUR SKIN WILL QUICKLY CAUSE DETERIORATION OF THE
R LAMP.
R IF YOU ACCIDENTALLY TOUCH THE LAMP GLASS, CLEAN IT WITH A
R LINT-FREE CLOTH.

(a)Install reading light on panel using the three screws (1).
(b)Install furnishing panel.
(c)Connect electrical connector.

(3)Test
(a)Energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(b)Remove safety clips and tags and close circuit breakers 4LE and 52LE.
(c)Check that replacement reading light comes on.



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Captain and First Officer Reading Lights (23LE and 34LE)
Figure 401

C. Removal/Installation of Reading Lights (63LE, 107LE, 146LE, 147LE)
(Ref. Fig. 402)

(1)Removal

R CAUTION : DO NOT TOUCH THE LAMP GLASS WITH YOUR FINGERS.
R THE OILS FROM YOUR SKIN WILL QUICKLY CAUSE DETERIORATION OF THE
R LAMP.
R IF YOU ACCIDENTALLY TOUCH THE LAMP GLASS, CLEAN IT WITH A
R LINT-FREE CLOTH.

(a)Remove furnishing panel from corresponding reading lights (63LE, 107LE, 146LE, 147LE).
(b)Disconnect electrical connectors.
(c)Remove circlip (1) from reading light support (2).

(2)Installation

R CAUTION : DO NOT TOUCH THE LAMP GLASS WITH YOUR FINGERS.
R THE OILS FROM YOUR SKIN WILL QUICKLY CAUSE DETERIORATION OF THE
R LAMP.
R IF YOU ACCIDENTALLY TOUCH THE LAMP GLASS, CLEAN IT WITH A
R LINT-FREE CLOTH.

(a)Install reading light on panel using circlip (1).
(b)Connect electrical connectors.
(c)Install furnishing panel.

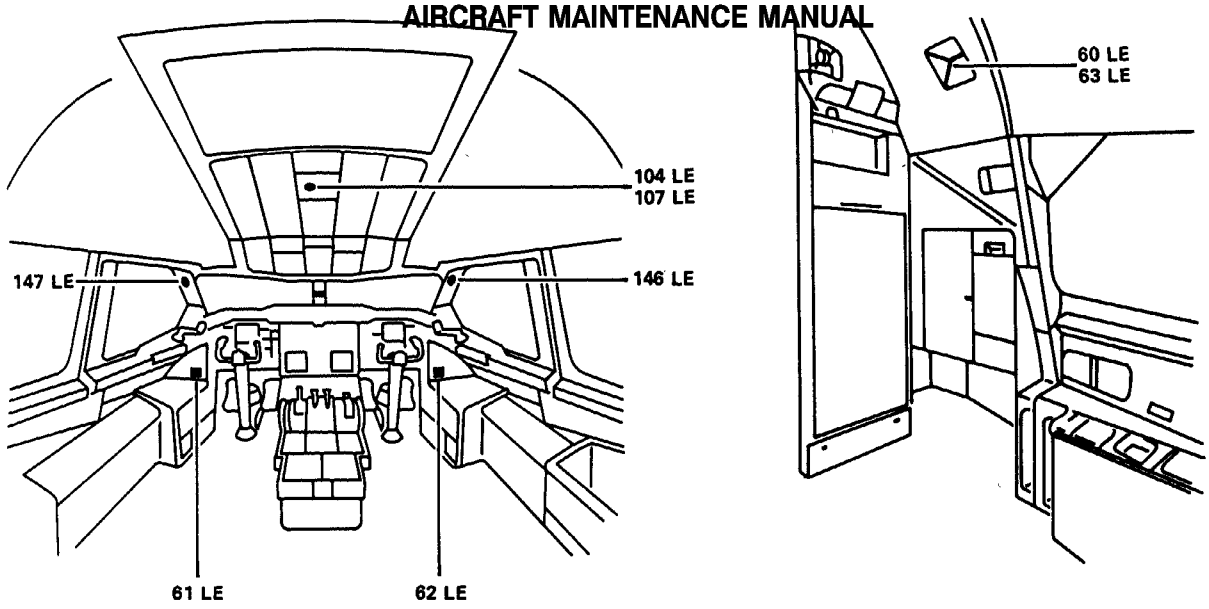
(3)Test

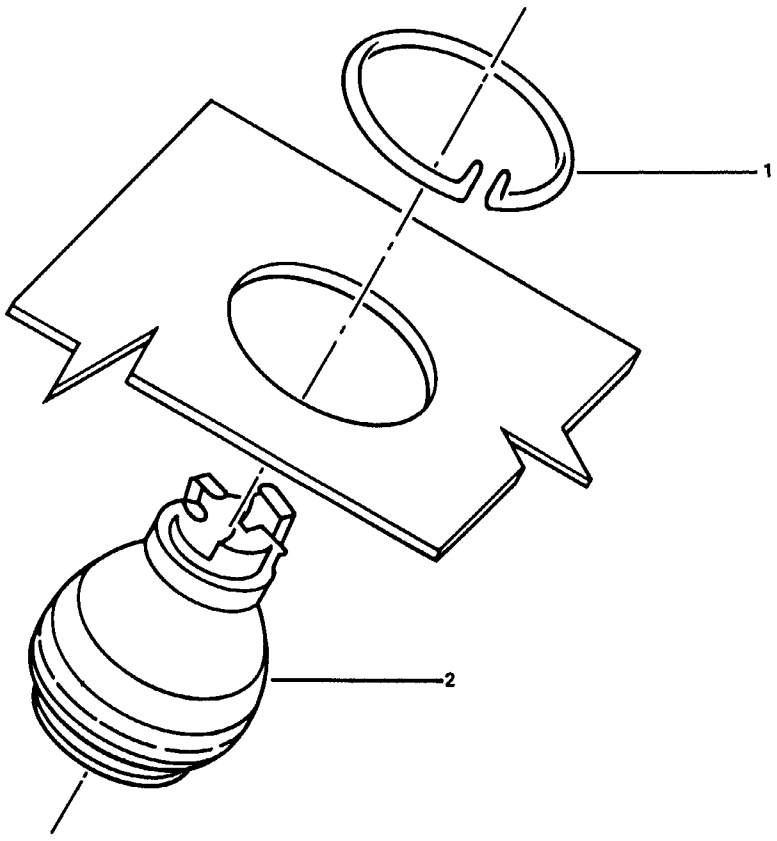
(a)Energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(b)Remove safety clips and tags and close circuit breakers 4LE and 52LE.
(c)Press READING LT rheostat knob, then turn gradually to maximum BRT position :
- READING LT rheostat 104LE on panel 431VU for Maintenance Panel Reading Light 107LE
- READING LT rheostat 60LE on panel 449VU for First Observer Reading Light 63LE
- READING LT rheostat 61LE on panel 419VU for CAPT Map Table Light 147LE
- READING LT rheostat 62LE on panel 420VU for F/O Map Table Light 146LE

(d)Check that replacement reading light comes on.
(e)Turn READING LT rheostat to minimum position.

D. Close-Up

(1)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(2)De-energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).





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Reading Lights (63LE, 107LE, 146LE, 147LE)
Figure 402

LIGHTING STRIP - REMOVAL/INSTALLATION

1. Reason for the Job
Removal/Installation of Captain and First Officer side map holder lighting strip (64LE, 65LE).

2. Equipment and Materials

ITEM	DESIGNATION
A.	Circuit Breaker Safety Clips
Referenced Procedure - 24-41-00, P. Block 301	AC External Power Control

3. Procedure
(Ref. Fig. 401)

A. Job Set-Up
(1)Open, safety and tag the following circuit breakers :

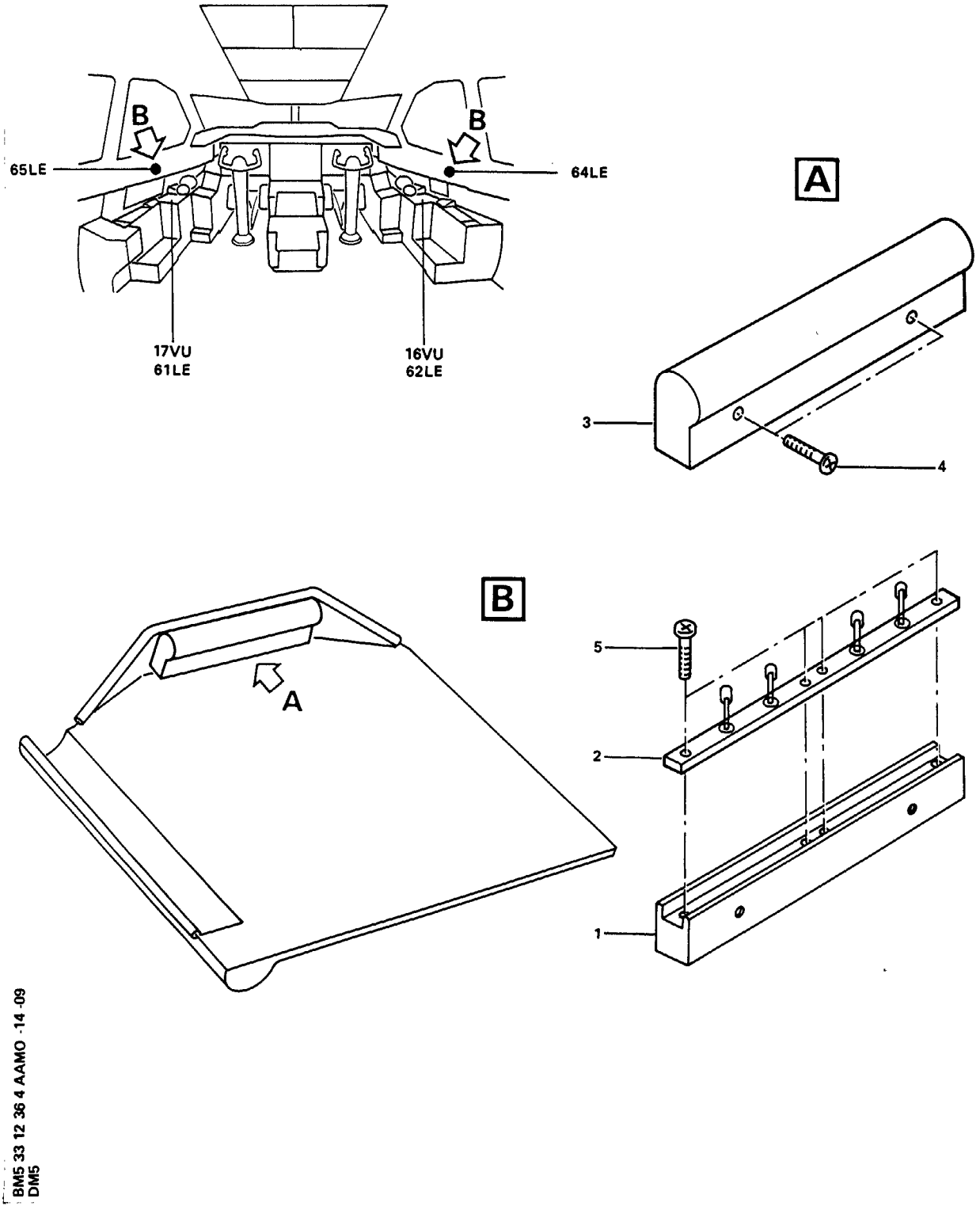
PANEL	SERVICE	IDENT.	LOCATION
129VU	FLOOD/CAPT/SIDE	4LE	902/T72
129VU	FLOOD/F/O/SIDE	52LE	902/T73

B. Removal
R (1)Remove male crimp contact for each connector.
(2)Remove the two screws (4) attaching strip (1).
(3)Remove diffuser (3).
(4)Remove the four screws (5) attaching printed circuit.
(5)Remove printed circuit assembly (2).

C. Preparation of Replacement Component
Check that each lamp weld spot on the printed circuit is in good condition.

D. Installation
(1)Install printed circuit assembly (2) on strip (1).
(2)Tighten the four screws (5) attaching printed circuit.
(3)Install diffuser (3).
(4)Install the two screws (4) attaching lighting strip (1).
R (5)Install male crimp contact in female connection for each wire.

E. Test
(1)Initial conditions
- correct electrical power supply
- forward services ventilation system in operation.
(2)Remove safety clips and tags and close circuit breakers 4LE and 52LE.
(3)On panel 16VU (17VU) place MAP LT rheostat in BRT position (Ref. Fig. 401).
(4)Check that lighting strip comes on.



Captain and First Officer Side Map Holder Lighting Strip
Figure 401

(5)On panel 16VU (17VU) place MAP LT rheostat in OFF position.

F. Close-Up

(1)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.

(2)De-energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).

CONTROL WHEEL CHART HOLDER LIGHT (108LE, 109LE) - REMOVAL/INSTALLATION

1. Equipment and Materials

ITEM	DESIGNATION
A.	Circuit Breaker Safety Clips
Referenced Procedure - 24-41-00, P. Block 301	AC External Power Control

2. Procedure

(Ref. Fig. 401)

A. Job set-up

(1)Energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).

(2)Open, safety and tag the following circuit breakers :

PANEL	SERVICE	IDENT.	LOCATION
132VU	LT INTERIOR LT-CAPT SIDE	4LE	321/P77
132VU	LT INTERIOR LT-F/O SIDE	52LE	321/P78

B. Removal

CAUTION : DO NOT TOUCH THE LAMP GLASS WITH YOUR FINGERS. THE OILS FROM YOUR SKIN WILL QUICKLY CAUSE DETERIORATION OF THE LAMP. IF YOU ACCIDENTALLY TOUCH THE LAMP GLASS, CLEAN IT WITH A LINT-FREE CLOTH.

(1)Remove screws (1).

(2)Remove covering (2).

(3)Remove cover (6).

(4)Remove screw (3).

(5)Carefully push lamp (4) and remove lamp socket (5).

NOTE : During removal of lamp socket, make certain not to cause damage to wirings.

(6)Remove lamp (4) from lamp socket (5).

C. Installation

CAUTION : DO NOT TOUCH THE LAMP GLASS WITH YOUR FINGERS. THE OILS FROM YOUR SKIN WILL QUICKLY CAUSE DETERIORATION OF THE LAMP. IF YOU ACCIDENTALLY TOUCH THE LAMP GLASS, CLEAN IT WITH A LINT-FREE CLOTH.

(1)Install lamp (4) on lamp socket (5).

(2)Put lamp socket (5) in position in control wheel chart holder (7).

NOTE : During installation of lamp socket, make certain not to cause damage to wirings.

(3)Make certain that screw hole of lamp socket and screw hole of control wheel chart holder are aligned.

(4)Install screw (3).

(5)Install cover (6).

(6)Put covering (2) in position.

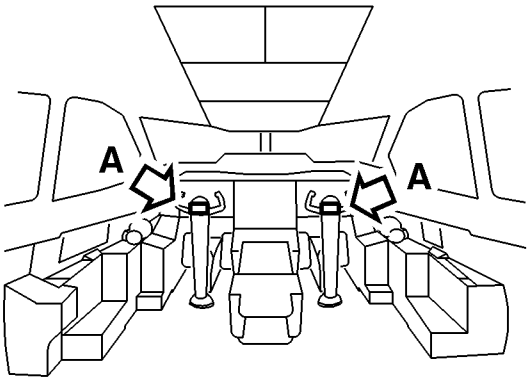
(7)Install screws (1).

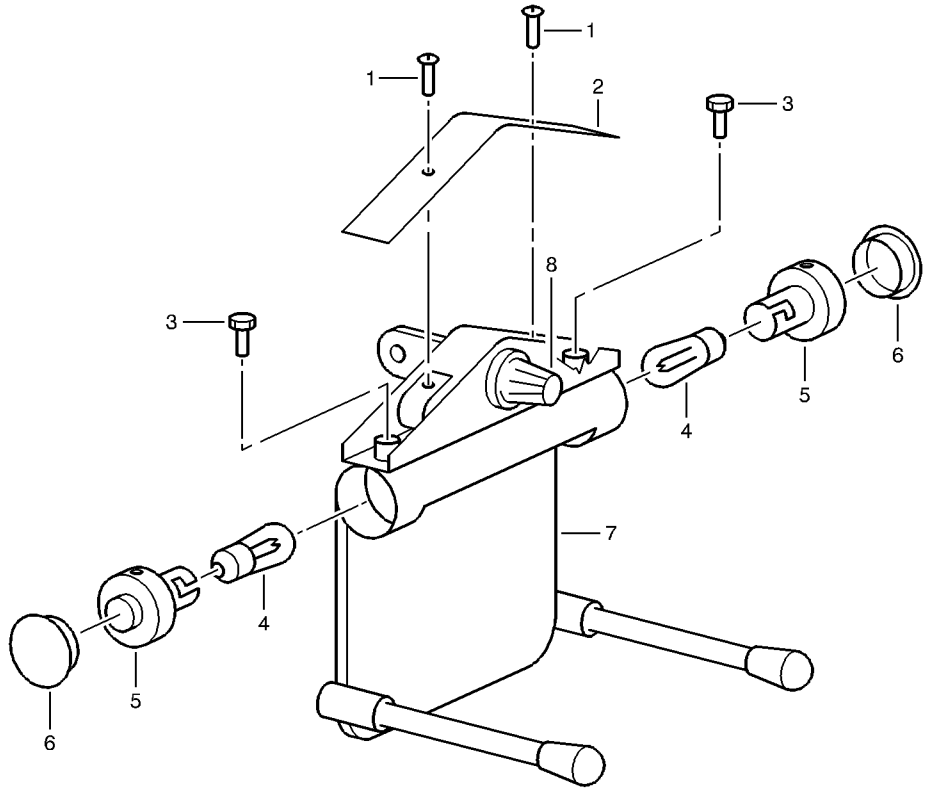
D. Test

(1)Remove safety clip and tag and close circuit breakers 4LE, 52LE.

(2)Turn potentiometer (8) clockwise.

(3)Check that lamp (4) comes on.





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Control Wheel Chart Holder Light
Figure 401

(4)Turn potentiometer (8) counterclockwise to put it back in its initial position.

D. Close-up

(1)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.

(2)De-energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).

INSTRUMENT AND PANEL INTEGRAL LIGHTING - DESCRIPTION AND OPERATION

1. General

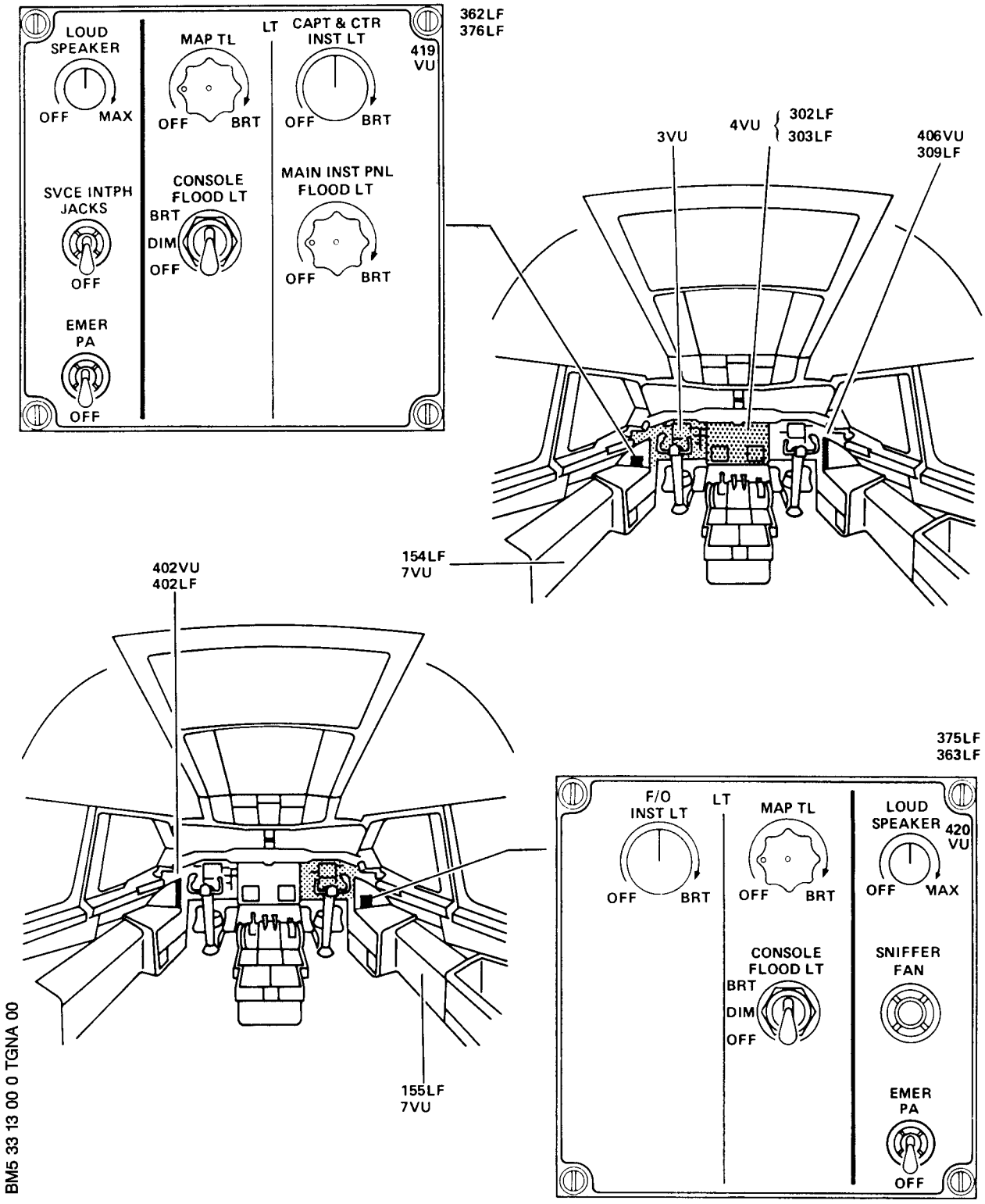
Instruments and panels incorporate an adjustable integral lighting system enabling the crew to read indications during night flights or flight in stormy conditions.

2. Component Location

R (Ref. Fig. 001)

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF.
20LF	TRANSFORMER-115/5, PNL 110VU INTEGRAL LT	110VU	144		33-13-13
59LF	PLATE-INTEGRALLY LIGHTED, 110VU	110VU	144		
67LF	LIGHT BOARD-LINE 101	21VU	210	121BL	
68LF	LIGHT BOARD-LINE 102	21VU	210	121BL	
69LF	LIGHT BOARD-LINE 103	21VU	210	121BL	
70LF	LIGHT BOARD-LINE 104	21VU	210	121BL	
71LF	LIGHT BOARD-LINE 105	21VU	210	121BL	
72LF	LIGHT BOARD-LINE 106	21VU	210	121BL	
73LF	LIGHT BOARD-LINE 107	21VU	210	121BL	
74LF	LIGHT BOARD-LINE 108	21VU	210	121BL	
75LF	LIGHT BOARD-LINE 109	21VU	210	121BL	
80LF	LIGHT BOARD-LINE 201	22VU	210	121BL	
81LF	LIGHT BOARD-LINE 202	22VU	210	121BL	
82LF	LIGHT BOARD-LINE 203	22VU	210	121BL	
83LF	LIGHT BOARD-LINE 204	22VU	210	121BL	
84LF	LIGHT BOARD-LINE 205	22VU	210	121BL	
85LF	LIGHT BOARD-LINE 206	22VU	210	121BL	
86LF	LIGHT BOARD-LINE 207	22VU	210	121BL	
87LF	LIGHT BOARD-LINE 208	22VU	210	121BL	
88LF	LIGHT BOARD-LINE 209	22VU	210	121BL	
94LF	PLATE-INTEGRALLY LIGHTED, SPEED BRAKE	9VU	210	121BL	
110LF	PLATE-INTEGRALLY LIGHTED, FUEL/ON/OFF	9VU	210	121BL	
112LF	PLATE-INTEGRALLY LIGHTED, SLATS/FLAPS	9VU	210	121BL	
116LF	PLATE-INTEGRALLY LIGHTED, 45VU	20VU	210	121BL	
154LF	PLATE-INTG LIGHTED, CAPT NWS	1VU	211	121BL	
155LF	PLATE-INTG LIGHTRD, F/O NWS	7VU	212	121BL	
163LF	LIGHT BOARD-PITCH TRIM, CAPT	9VU	210	121BL	
164LF	LIGHT BOARD-PITCH TRIM, F/O	9VU	210	121BL	
165LF	PLATE-INTG LIGHTED, 21VU C/B NUM LOCATION	21VU	211	121BL	
168LF	PLATE-INTG LIGHTED, 22VU C/B NUM LOCATION	22VU	211	121BL	
208LF	SWITCH-STBY COMPASS LIGHT	436VU	212		
300LF	PLATE-INTG LIGHTED, 431VU	431VU	210	121BL	
301LF	PLATE-INTG LIGHTED, 425VU	425VU	210	121BL	
302LF	PLATE-INTG LIGHTED, 400VU	400VU	210	121BL	
303LF	PLATE-INTG LIGHTED, 401VU	401VU	210	121BL	
307LF	PLATE-INTG LIGHTED, 427VU	427VU	210	121BL	

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF.
308LF	PLATE-INTG LIGHTED, 421VU	424VU	210	121BL	
309LF	PLATE-INTG LIGHTED, 406VU	406VU	212	121BL	
310LF	PLATE-INTG LIGHTED, 423VU	423VU	210	121BL	
311LF	PLATE-INTG LIGHTED, 428VU	428VU	210	121BL	
312LF	PLATE-INTG LIGHTED, 435VU	435VU	210	121BL	
313LF	PLATE-INTG LIGHTED, 429VU	429VU	210	121BL	
315LF	PLATE-INTG LIGHTED, 426VU	426VU	210	121BL	
316LF	PLATE-INTG LIGHTED, 430VU	430VU	210	121BL	
317LF	PLATE-INTG LIGHTED, 432VU	432VU	210	121BL	
318LF	PLATE-INTG LIGHTED, 433VU	433VU	210	121BL	
320LF	PLATE-INTG LIGHTED, 436VU	436VU	210	121BL	
321LF	PLATE-INTG LIGHTED, 412VU	412VU	212	121BL	
322LF	PLATE-INTG LIGHTED, 413VU	413VU	211	121BL	
323LF	PLATE-INTG LIGHTED, 417VU	417VU	210	121BL	
326LF	PLATE-INTG LIGHTED, 437VU	437VU	210	121BL	
350LF	PLATE-INTG LIGHTED, 408VU	408VU	210	121BL	
352LF	PLATE-INTG LIGHTED, 438VU	438VU	210	121BL	
353LF	PLATE-INTG LIGHTED, 440VU	440VU	210	121BL	
354LF	PLATE-INTG LIGHTED, 442VU	442VU	210	121BL	
356LF	PLATE-INTG LIGHTED, 441VU	441VU	210	121BL	
357LF	PLATE-INTG LIGHTED, 414VU	414VU	210	121BL	
362LF	POT-INTG LTG, CAPT & CTR INST LT	419VU	211	121BL	
363LF	POT-INTG LTG, F/O INST LT	420VU	212	121BL	
364LF	POT-INTG LTG, PED & OVHD PANEL	11VU	211	121BL	
365LF	POT-INTG LTG, GLARESHIELD	13VU	210	121BL	
367LF	CONTROLLER-INTG LTG, CAPT & CTR INST		122	121BL	
368LF	CONTROLLER-INTG LTG, F/O INST		122	121BL	
370LF	CONTROLLER-INTG LTG, PED & OVHD PNL	120VU	212	121BL	
371LF	CONTROLLER-INTG LTG, GLARESHIELD		122	121BL	
374LF	RELAY-INTERIOR LIGHTING CONTROL	490VU	212	121BL	
375LF	PLATE-INTG LIGHTED, 420VU	420VU	212	121BL	
376LF	PLATE-INTG LIGHTED, 419VU	419VU	211	121BL	
377LF	PLATE-INTG LIGHTED, 444VU	444VU	210	121BL	
400LF	PLATE-INTG LIGHTED, 449VU	449VU	211	121BL	
402LF	PLATE-INTG LIGHTED, 402VU	402VU	211	121BL	



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Instrument and Panel Integral Lighting
Component Location - Sheet 1/5
Figure 001

EFFECTIVITY: ALL

R

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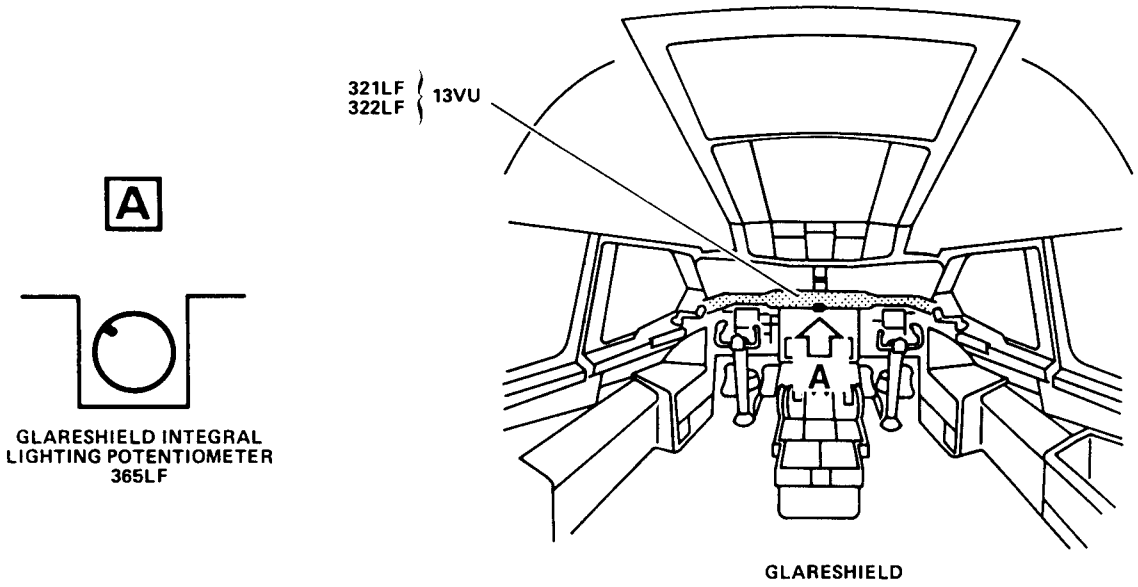

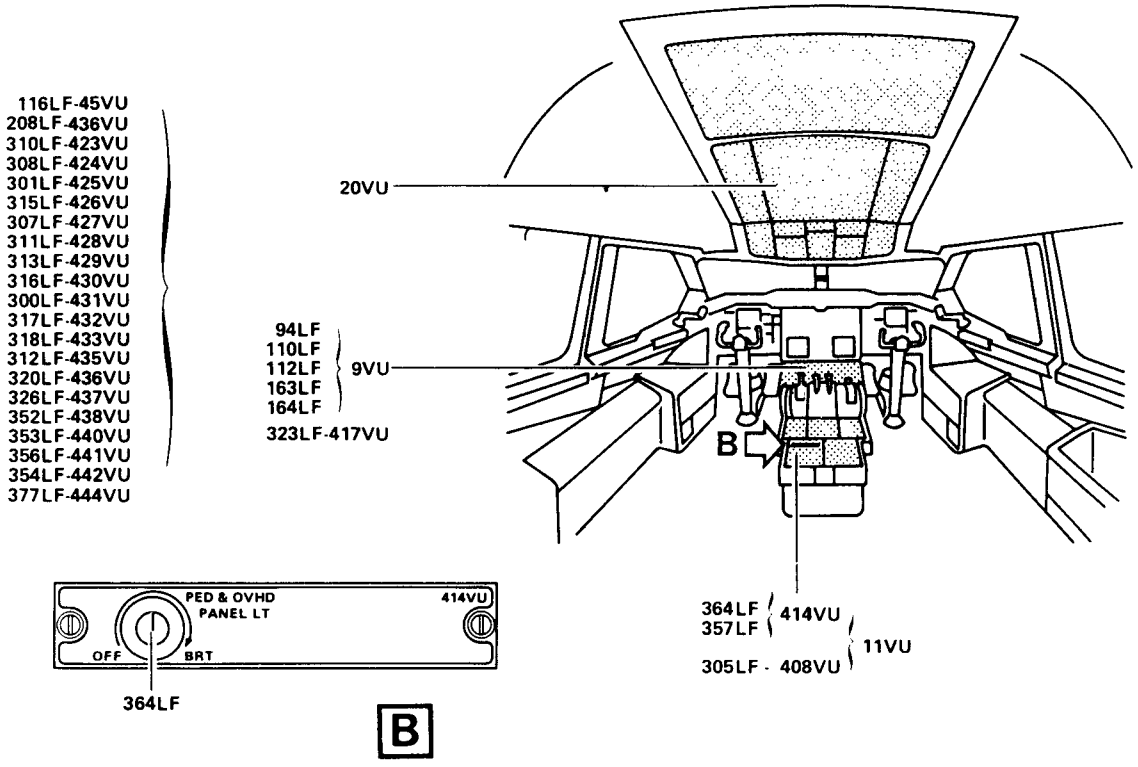

Instrument and Panel Integral Lighting
Component Location - Sheet 2/5
Figure 001

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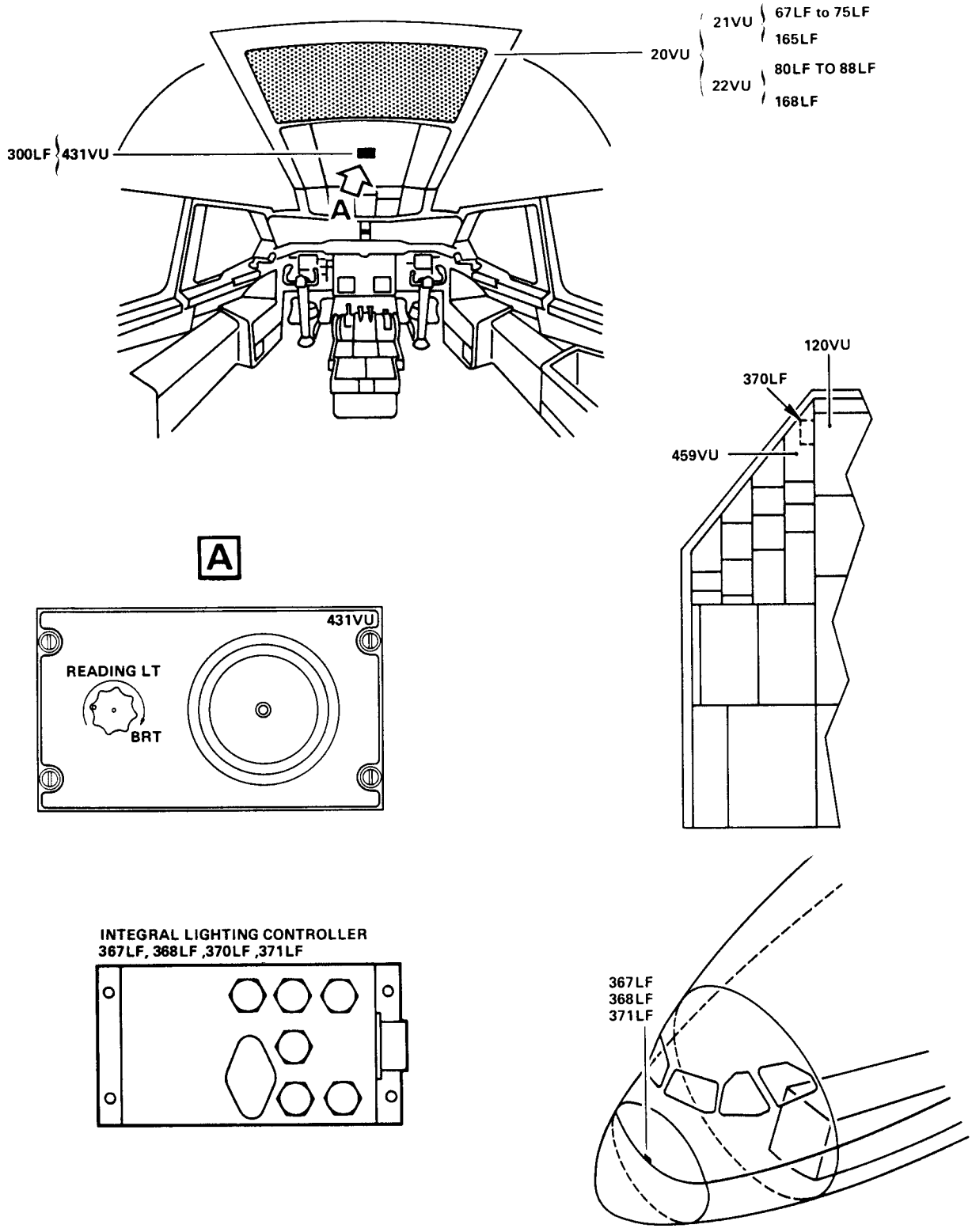

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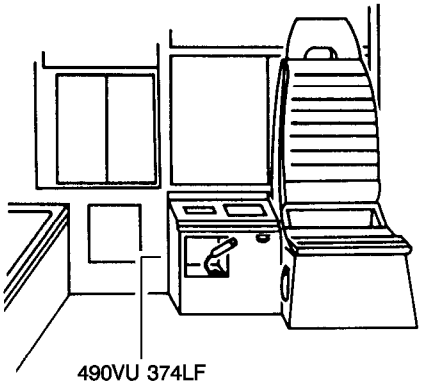
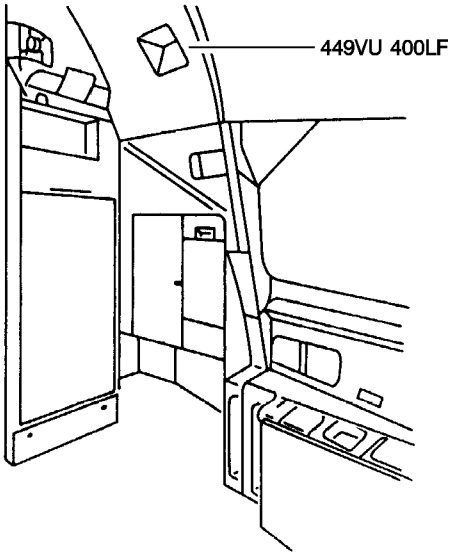
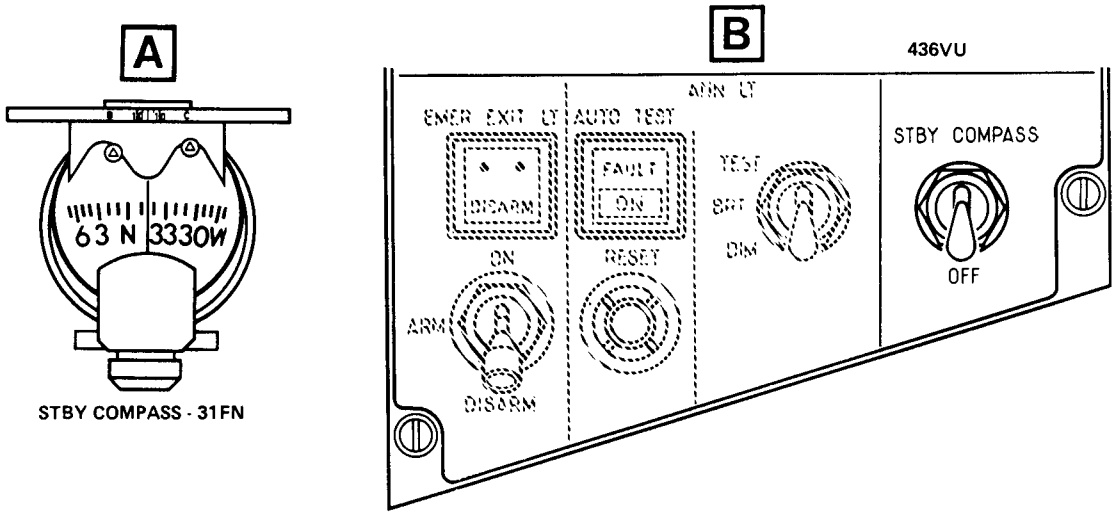
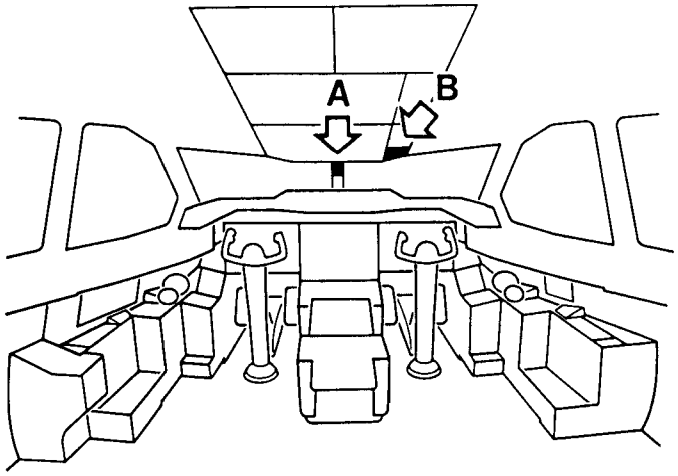
Instrument and Panel Integral Lighting
Component Location - Sheet 3/5
Figure 001

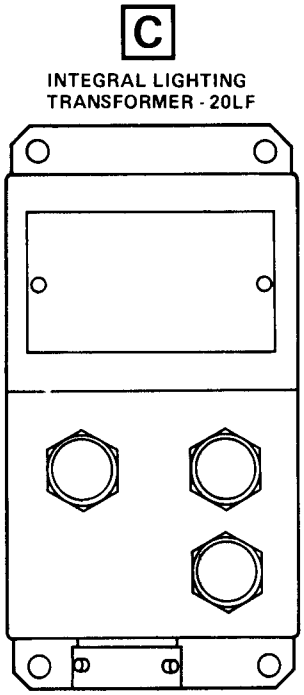


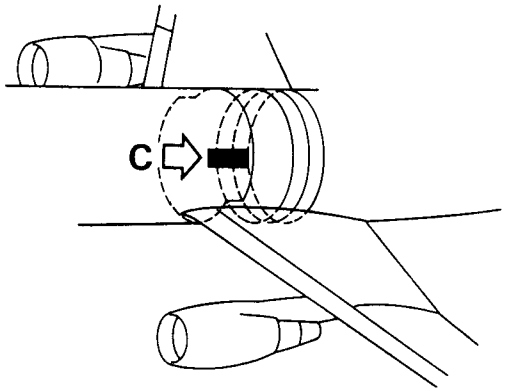


Instrument and Panel Integral Lighting
Component Location - Sheet 4/5
Figure 001









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Instrument and Panel Integral Lighting
Component Location - Sheet 5/5
Figure 001

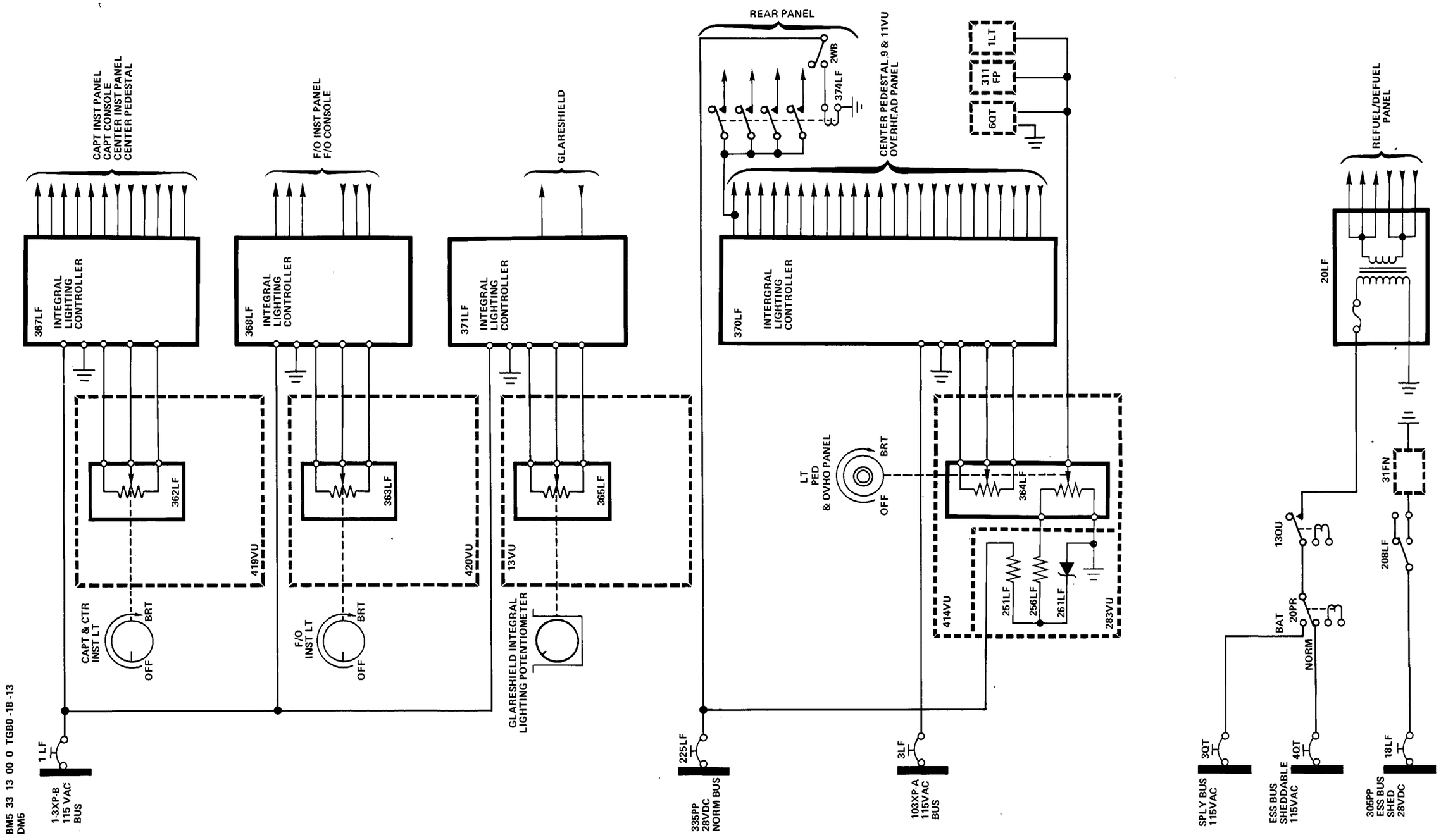
3. Description - Operation

The integral lighting installed on panels and instruments is composed of miniature lamps supplied by AC voltage of between 0 and 5.2 V.
The voltage is provided by means of integral lighting controllers.

A. Integral Lighting Controllers
(Ref. Fig. 002)
The controllers generate a low voltage and high intensity source from the 115 V/400 Hz voltage.
A low power potentiometer adjusts the output voltage continuously between 0 and 5.2 effective volts. A 470 Ω - 2 W potentiometer corresponds to each integral lighting controller.
The following tables describe the main characteristics and the function of each integral lighting controller.

FUNCTION : Integral lighting of plates and instruments	Controller Functional Item Number	Max. output power	Number of fuses	Zone location	Power supply circuit breaker Functional Item Number	Power supply busbar	Location for control
Captain's instrument panel Center instrument panel Captain's console	367LF	150 watts	6	122	1LF	103XP0B	419VU
First Officer's instrument panel First Officer's console	368LF	75 watts	3	122	1LF	103XP0B	420VU
Glareshield	371LF	25 watts	1	122	1LF	103XP0B	13VU
Center pedestal Overhead panel	370LF	300 watts	12	212	3LF	103XP0A	414VU

B. Maintenance Panels
The maintenance panels are not provided with integral lighting. Plates of these panels are engraved.
The indicators installed on these panels are provided with integral lighting when ANN LT switch 2WB located on panel 472VU is in READ or TEST position.
The panels are distributed as follows :
Two maintenance panels are provided :
471VU, 472VU.



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Integral Lighting Controller - Schematic Diagram
Figure 002

C. Circuit Breaker Panels
The panels are distributed as follows :
(1)Overhead circuit breaker panels 21VU and 22VU are lighted by light boards to which are affixed adhesive placards indicating the function of each circuit breaker.
(2)Panel 120VU is not lighted. The function of each circuit breaker and the identification of their location are written on engraved plates.

D. The integral lighting system of panels and instruments is divided into several circuits :

**ON A/C ALL

R

(Ref. Fig. 003)

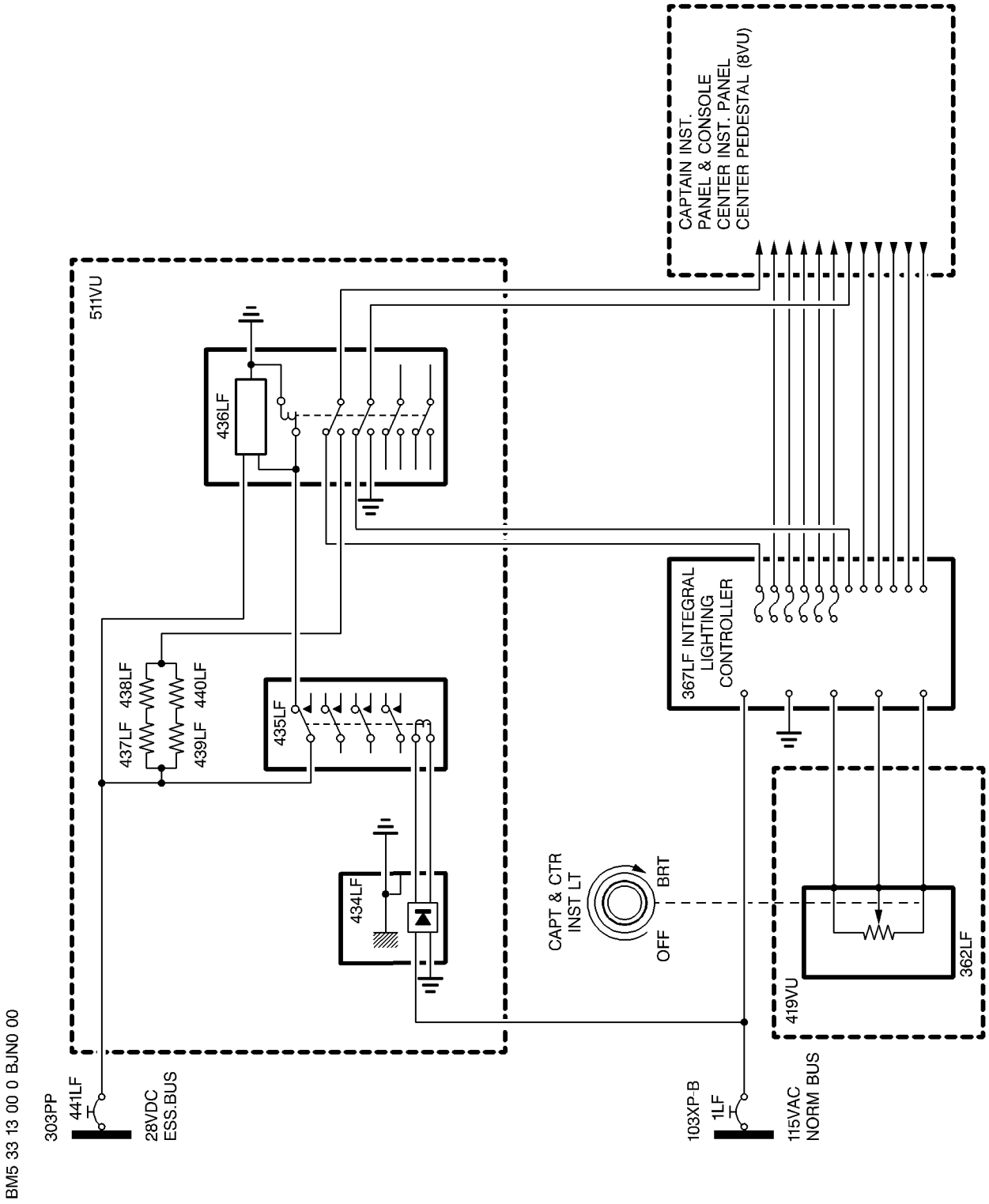
**ON A/C ALL

(Ref. Fig. 004)
(Ref. Fig. 005)
(Ref. Fig. 006)
(Ref. Fig. 007)

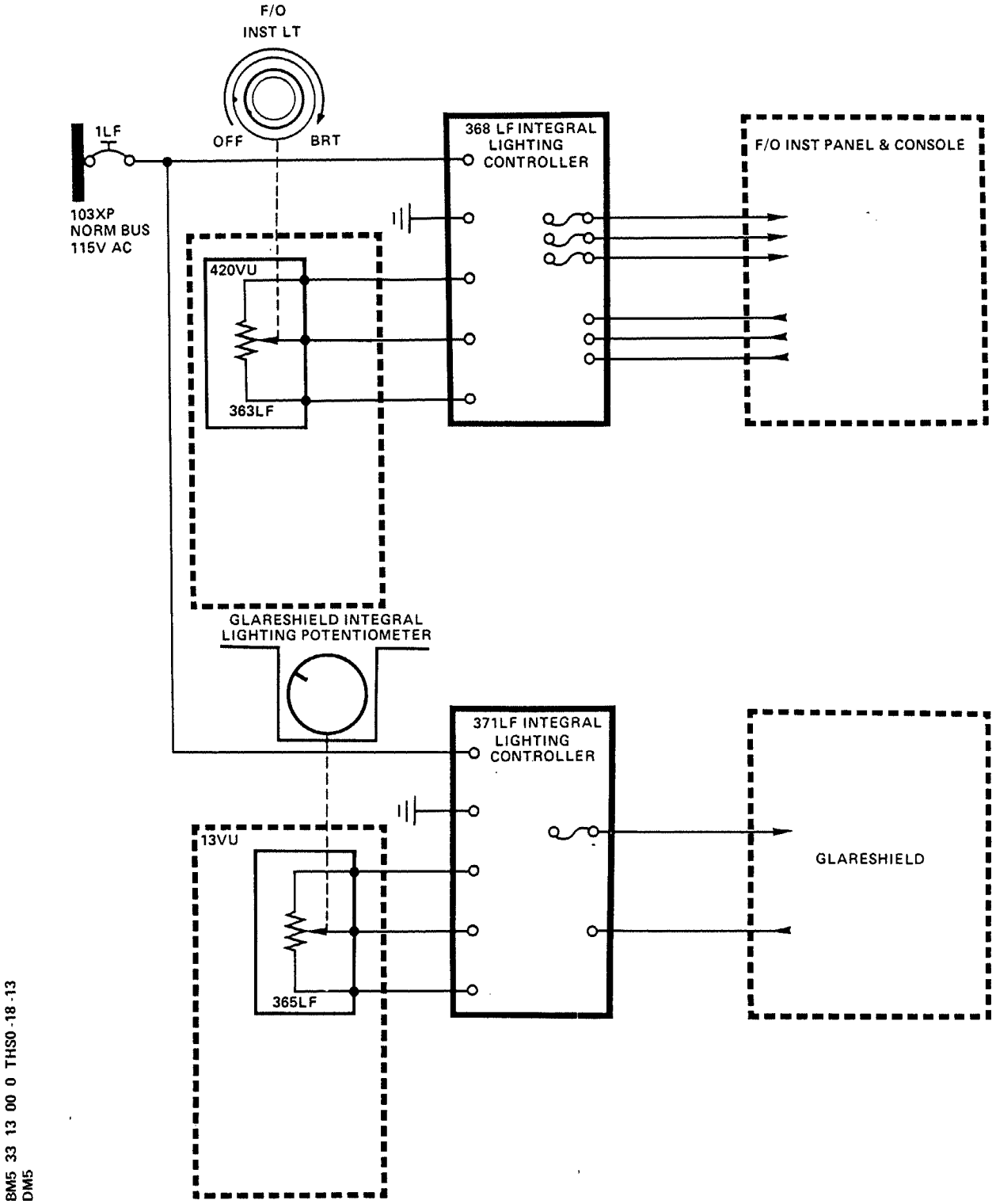
**ON A/C ALL

R

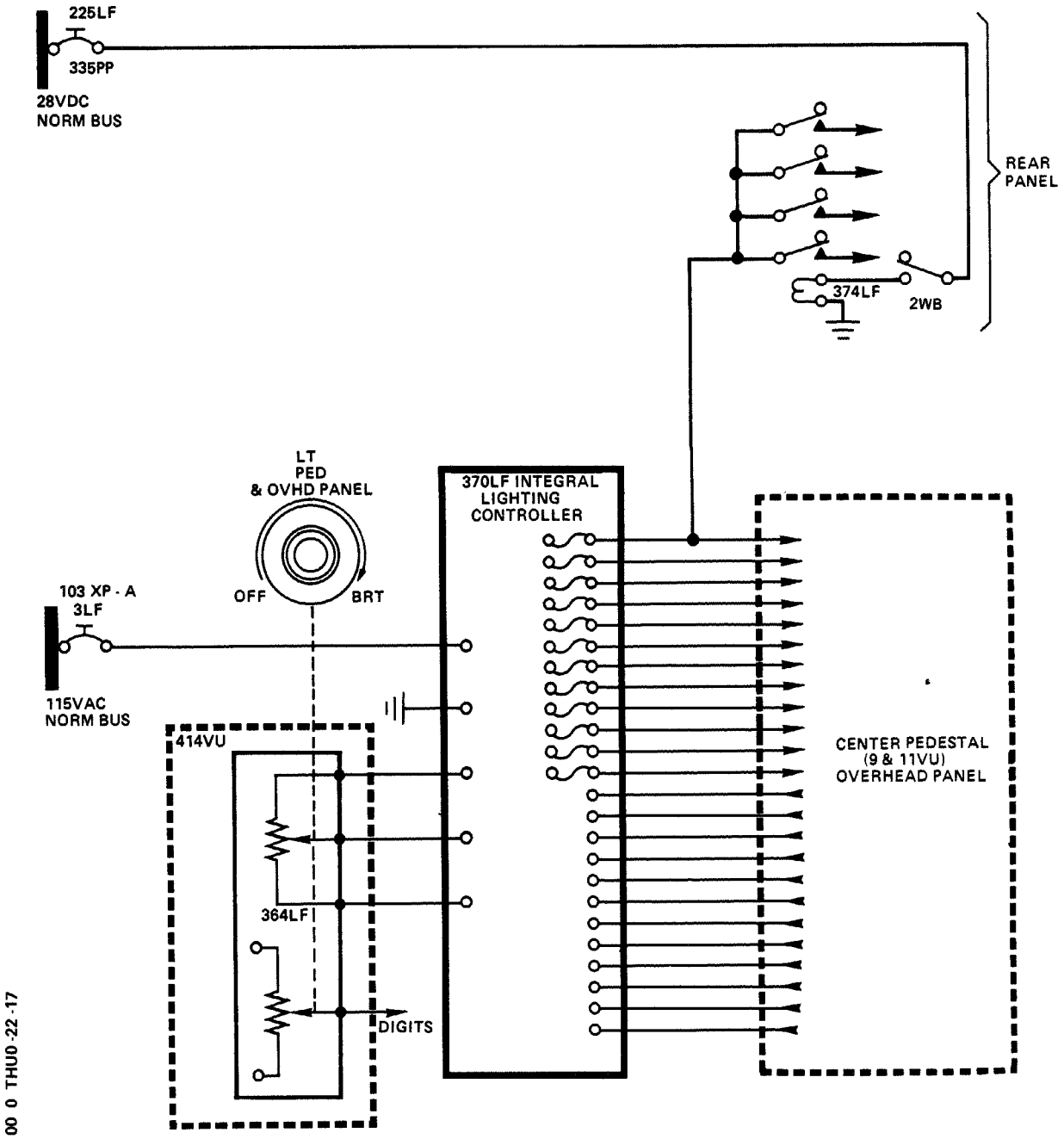
(1)The integral lighting circuit of Captain's main instrument panel (3VU), upper and lower center instrument panels (4VU and 8VU), left instrument panel and Captain's console comprises :
(a)On rear circuit breaker panel 132VU :
- a circuit breaker 1LF supplied with 115V/400 Hz by busbar 103XP,
- a circuit breaker 441LF supplied with 28VDC by busbar 303PP.
NOTE : 28VDC is supplied to standby horizon indicator 25FN1 through circuit breaker 441LF only when busbar 103XP is not energized.
(b)On Captain's lighting/audio panel 419VU, a CAPT & CTR INST LT potentiometer 362LF which adjusts the integral lighting brightness.
(c)In zone 122, a CAPT and center instrument integral lighting controller 367LF supplied with 115V/400 Hz through circuit breaker 1LF. Panel and instrument lighting comprises six outputs.
(2)The integral lighting circuit of First Officer's main instrument panel (5VU), right instrument panel and First Officer's console comprises :
(a)On panel 132VU, a circuit breaker 1LF supplied with 115V/400 Hz by busbar 103XP.
(b)On First Officer's lighting/audio panel 420VU, a F/O INST LT potentiometer 363LF which adjusts the integral lighting brightness.
(c)In zone 122 a F/O instrument integral lighting controller 368LF supplied with 115V/400 Hz through circuit breaker 1LF. Panel and



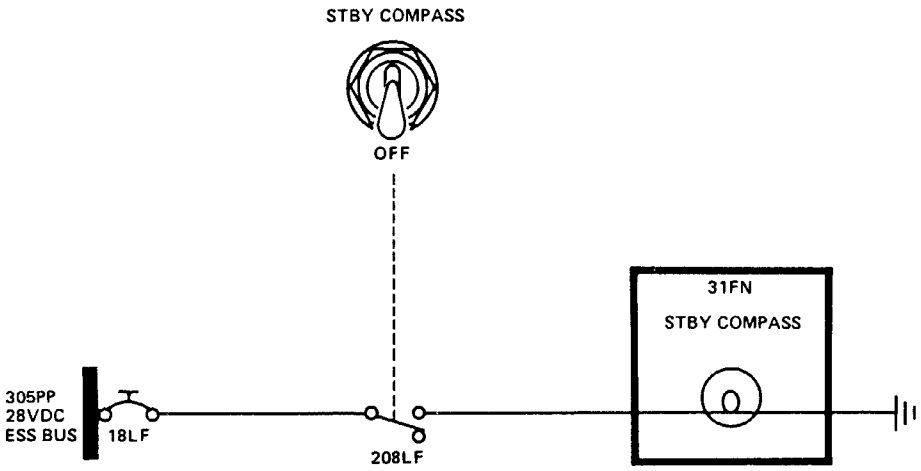
Captain and Center Instrument Panel - Schematic Diagram
Figure 003



F/O Instrument Panel Console and Glareshied - Schematic Diagram
Figure 004



Center Pedestal and Overhead Panel - Schematic Diagram
Figure 005



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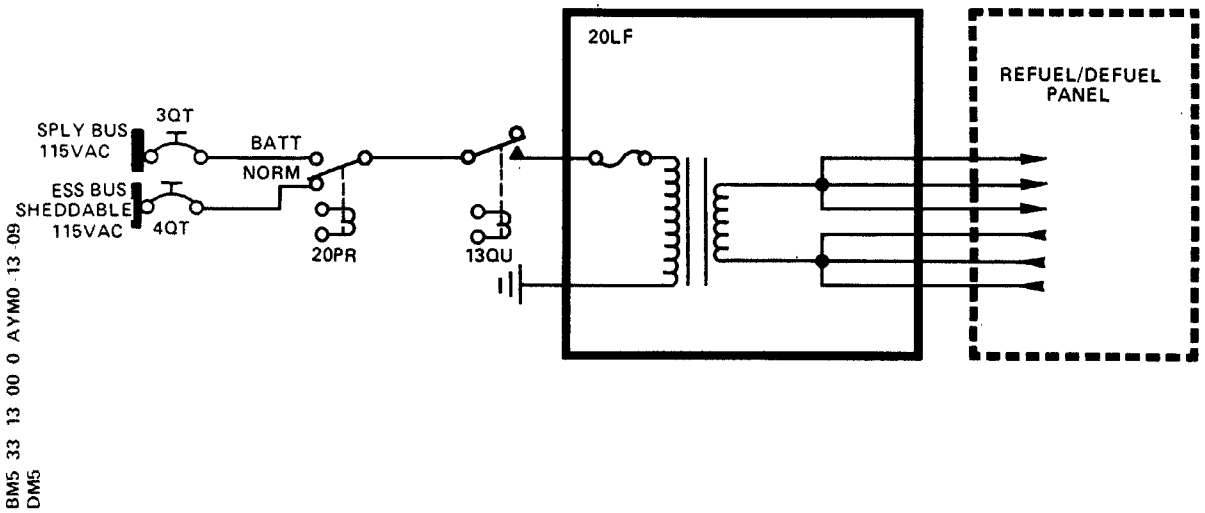
Standby Compass - Schematic Diagram
Figure 006



Refuel/Defuel Panel - Schematic Diagram
Figure 007

instrument lighting, at First Officer's side, comprises three outputs.

(3)The glareshield (13VU) integral lighting circuit comprises :

(a)On panel 132VU, a circuit breaker 1LF supplied with 115V/400 Hz by busbar 103XP.

(b)In the glareshield center, at the lower section, a glareshield integral lighting potentiometer 365LF which adjusts brightness of integral lighting.

(c)In zone 212, a glareshield integral lighting controller 371LF supplied with 115V/400 Hz through circuit breaker 1LF. An output distributes panel and instrument lighting on the glareshield.

(4)The center pedestal and overhead panel integral lighting circuit comprises :

(a)On panel 132VU, a circuit breaker 3LF supplied with 115V/400 Hz by busbar 103XP.

(b)On PED and OVHD PANEL LT panel 414VU, a pedestal and overhead panel potentiometer 364LF which adjusts brightness of integral lighting.

(c)On rear panel 120VU, a pedestal and overhead panel integral lighting controller 370LF supplied with 115V/400 Hz through circuit breaker 3LF. The panel and instrument lighting comprises twelve outputs.

(5)The integral lighting circuit of the maintenance panel indicators, of the various circuit breaker panels and the Third Occupant console 300VU comprises :

(a)In maintenance panel 490VU, a four-stage relay 374LF (120 RU 01) which distributes electrical power to maintenance panel indicators.

(b)On maintenance panel 472VU, a three-position (OFF-READ-TEST) ANN LT switch 2WB. With the switch in READ and TEST positions, relay 374LF is energized thus maintenance panel indicators are provided with integral lighting.

(6)The standby compass integral lighting comprises :

(a)A circuit breaker 18LF supplied with 28VDC by busbar 305PP on panel 132VU.

(b)On AIR BLEED panel 436VU, a STBY COMPASS switch which controls the standby compass integral lighting.

(7)The refuel/defuel panel integral lighting circuit comprises :

(a)On refuel/defuel panel 110VU, a relay 13QU controlled by two refuel/defuel panel access door microswitches.

(b)In zone 144, a transformer 20LF (power 25VA) supplied with 115V/400 Hz. The transformer delivers a fixed 5VAC voltage. This voltage supplies the identification plate on panel 110VU and the components located on it :

Quantity preselector and FUEL QTY indicator (five display windows).

(8)The alphanumerical display instrument integral lighting circuit.

Several indicators are provided with alphanumerical displays. A variable voltage of between 0.8 V and 5 V and delivered by DC power supply through 28VDC enables brightness to be adjusted.

(a)The power supply is generated through busbar 305PP.

A resistor bridge referenced by a Zener diode provides variable voltage. A 470 Ω - 2 W potentiometer allows voltage to vary. It is concentric with the potentiometer which adjusts brightness of integral lighting. All power supplies are generated in diode box 283VU.

(9)Liquid crystal display components

For this kind of display, brightness adjustment is performed through 5VAC power supply of plate integral lighting.

(10) Flowbars

Several panels on the overhead panel are provided with flowbars between lights for a better comprehension of systems.

These flowbars are supplied by 5VAC power supply of plate integral lighting.

R 1. Operational Test

A. Reason for the Job
To check for correct operation of instrument and panel integral lighting.

B. Equipment and Materials

ITEM	DESIGNATION
Referenced Procedure - 24-41-00, P. Block 301	AC External Power Control

C. Procedure
(1)Job set-up
Initial conditions
(a)Energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(b)Make certain that electronics racks ventilation is correct.
(c)On panel 132VU, make certain that LIGHTING/INT LT/ DIGIT circuit breakers are closed.

(2)Test

ACTION	RESULT
1. On panel 436VU - place STBY COMPASS switch in upper position	In zone 210, standby compass integral lighting comes on with maximum brightness.
2. On panel 419VU - turn CAPT & CTR INST LT rheostat from OFF to BRT position	On Captain main instrument panel, captain console, center instrument panel, and center pedestal (panel 8VU only), light intensity of instrument and placard integral lighting varies with position of rheostat.
3. On panel 420VU - turn F/O INST LT rheostat from OFF to BRT position	On First Officer main instrument panel and console, light intensity of instrument and placard integral lighting varies with position of rheostat.
4. On panel 13VU - under center of glareshield panel - turn GLARESHIELD LT rheostat from OFF to BRT position.	On glareshield panel, light intensity of instrument and placard integral lighting varies with position of rheostat.
5. On panel 414VU - turn PED & OVHD PANEL rheostat	On overhead panel and center pedestal light intensity of instrument

ACTION	RESULT
(large concentric knob) from OFF to BRT position - turn PED & OVHD PANEL rheostat (small concentric knob) from OFF to BRT position	and placard integral lighting varies with position of rheostat. On overhead panel, light intensity of ISDU digits and IND FUEL QTY varie with position of rheostat.
6. On panel 472VU - place ANN LT switch in READ position - place ANN LT switch in OFF position.	On rear panel 120VU - instrument and CDU lighting comes on.
7. In zone 144, open refuel/defuel panel 110VU, access door 144ER.	On refuel/defuel panel 110VU - intrument and placard lighting is on.

(3)Close-Up
(a)De-energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(b)Restore system and aircraft to normal operating condition.

2. Functional Test
(Ref. Operational Test)

3. System Test
(Ref. Operational Test)

**ON A/C ALL

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4. Operational Check of Standby Horizon Integral Lighting Logic

A. Reason for the Job

To check for correct operation of standby horizon integral lighting logic.

B. Equipment and Materials

ITEM	DESIGNATION
Referenced Procedure - 24-41-00, P. Block 301	AC External Power Control

C. Procedure
(1)Job set-up
(a)Energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).

(b)Make certain that electronics racks ventilation is correct.

**ON A/C ALL

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(c)Make certain that the following circuit breakers are closed

PANEL	SERVICE	IDENT.	LOCATION
132VU	LIGHTING/INTEGRAL LT/MAIN PNL & GLARE SHLD	1LF	322/N76
22VU	NAVIGATION/STBY HORIZON	27FN1	204/F171
106VU	DC ESS BUSSMOKE DRILL/303PP	3PD	A25

**ON A/C ALL

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(2)Test

ACTION	RESULT
1. On panel 419VU - turn CAPT & CTR INST LT rheostat from OFF to BRT position	The light intensity of all instruments associated to this rheostat including STANDBY HORIZON varies with position of rheostat.
2. On panel 419VU - turn CAPT & CTR INST LT rheostat to OFF position	On STANDBY HORIZON, light intensity is minimum.
3. On panel 132VU - open circuit breaker 1LF	On STANDBY HORIZON, light intensity is maximum.
4. On panel 419VU - turn CAPT & CTR INST LT rheostat from OFF to BRT position and from BRT to OFF position	On STANDBY HORIZON, light intensity does not vary.
5. On panel 132VU - close circuit breaker 1LF	After few seconds, on STANDBY HORIZON, light intensity is minimum.
6. On panel 419VU - turn CAPT & CTR INST LT rheostat from OFF to BRT position	The light intensity of all instruments associated to this rheostat including STANDBY HORIZON varies with position of rheostat.

**ON A/C ALL

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(3)Close-Up
(a)De-energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(b)Restore system and aircraft to normal operating condition.

LIGHTING DEVICE - PITCH TRIM - REMOVAL/INSTALLATION

1. Equipment and Materials

ITEM	DESIGNATION
A. 97A27302009000	Locking Equipment - Pitch Trim Control Wheel
B.	Circuit Breaker Safety Clips
Referenced Procedures	
- 24-41-00, P. Block 301	Servicing AC External Power Control
- 27-41-11, P. Block 401	Control Mechanism - Pitch Trim
- 33-13-00, P. Block 501	Instrument and Panel Integral Lighting

2. Procedure

A. Job Set-Up
(1)Energize the aircraft electrical network (Ref. 24-41-00, P. Block 301)
(2)Make certain that pitch trim control wheel is in neutral position.
(3)Install pitch trim control wheel locking equipment 97A27302009000 on opposite pitch trim control wheel.
(4)Open, safety and tag the following circuit breaker :

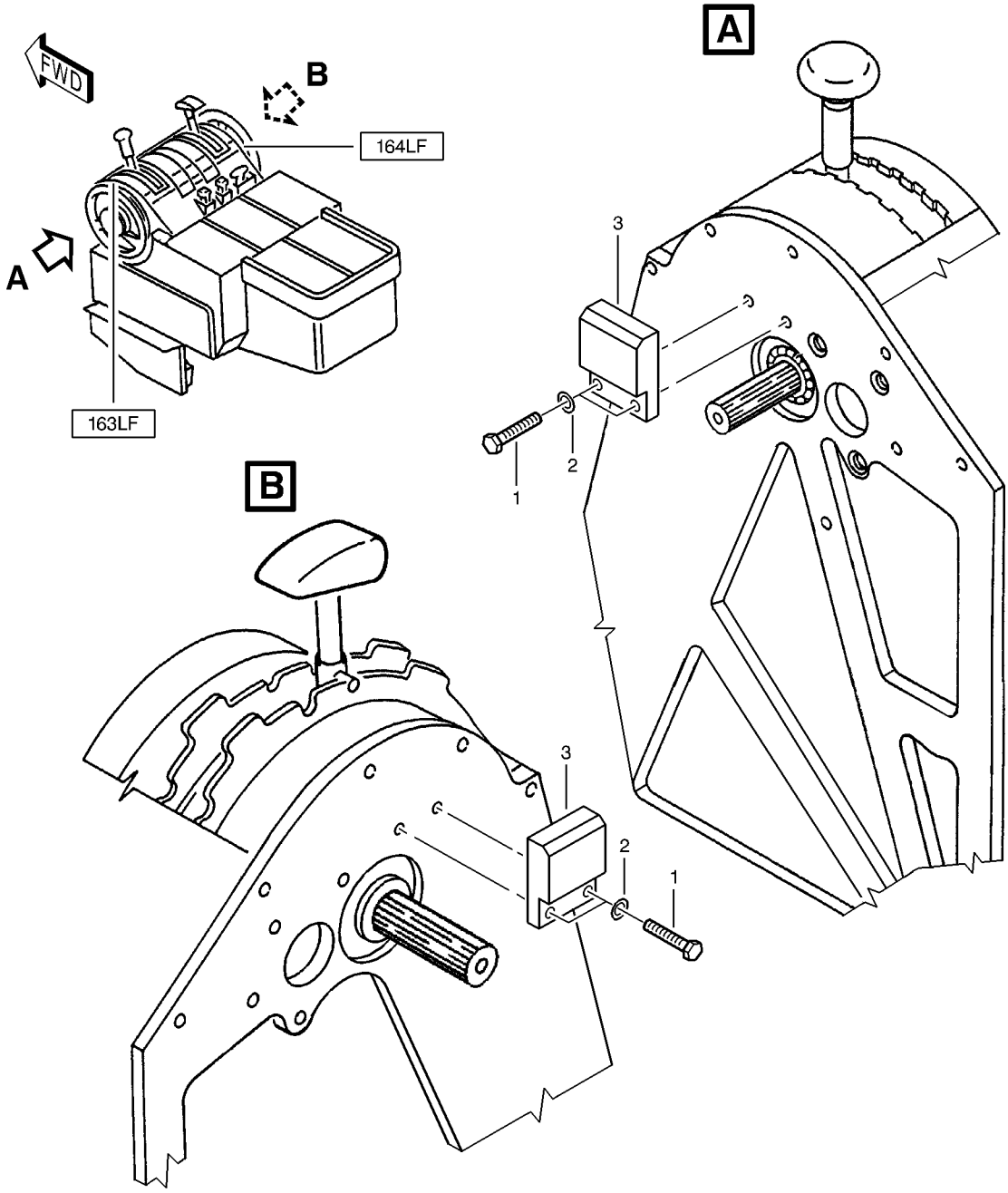
PANEL	SERVICE	IDENT.	LOCATION
132VU	LIGHTING/INTEGRAL LT/C/B &/OVHD/&PED	3LF	322/N77

(4)Mark position of pitch trim control wheel on center pedestal.

B. Removal
(Ref. Fig. 401)
(1)Remove pitch trim control wheel (Ref. 27-41-11, P. Block 401).
(2)Remove screws (1), washers (2) and disconnect lighting device (3).

C. Installation (Ref. Fig. 401)
(1)Connect lighting device (3), and install washers (2) and screws (1).
(2)Tighten screws (1).
(3)Install pitch trim control wheel (Ref. 27-41-11, P. Block 401).
(4)Make certain that mark of pitch trim control wheel is in line with mark on center pedestal.
(5)Remove safety clip and tag and close circuit breaker 3LF.
(6)Remove pitch trim control wheel locking equipment.
(7)Carry out test of pitch trim control wheel lighting (Ref. 33-13-00, P. Block 501).

D. Close-Up
(1)De-energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(2)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.



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Pitch Trim Lighting Device
Figure 401

LIGHTING CONTROLLER (367LF, 368LF, 370LF, 371LF) - REMOVAL/INSTALLATION

1. Equipment and Materials

ITEM	DESIGNATION
A.	Blanking caps
B.	Circuit Breaker Safety Clips
Referenced Procedures	
- 24-41-00, P. Block 301	AC External Power Control
- 33-13-00, P. Block 501	Instrument and Panel Integral Lighting

2. Procedure

(Ref. Fig. 401)

A. Job Set-Up

(1)Energize aircraft electrical network (Ref. 24-41-00, P. Block 301).

(2)Open, safety and tag the following circuit breakers :

PANEL	SERVICE	IDENT.	LOCATION
132VU	LIGHTING/INTEGRAL LT/MAIN/PNL &/ GLARE/SHLD	1LF	322/N76
132VU	LIGHTING/INTEGRAL LT/C/B &/OVHD/& PED	3LF	322/N77

(3)Open access door 121BL to gain access to avionics compartment.

B. Removal

(1)Disconnect electrical connector (1).

(2)Remove screws (2) and washers (3). During this operation, hold lighting controller (4).

(3)Remove lighting controller (4).

(4)Put blanking cap on electrical connector (1).

C. Installation

(1)Clean the component interface and/or the adjacent area.

(2)Do an inspection of the component interface and/or the adjacent area.

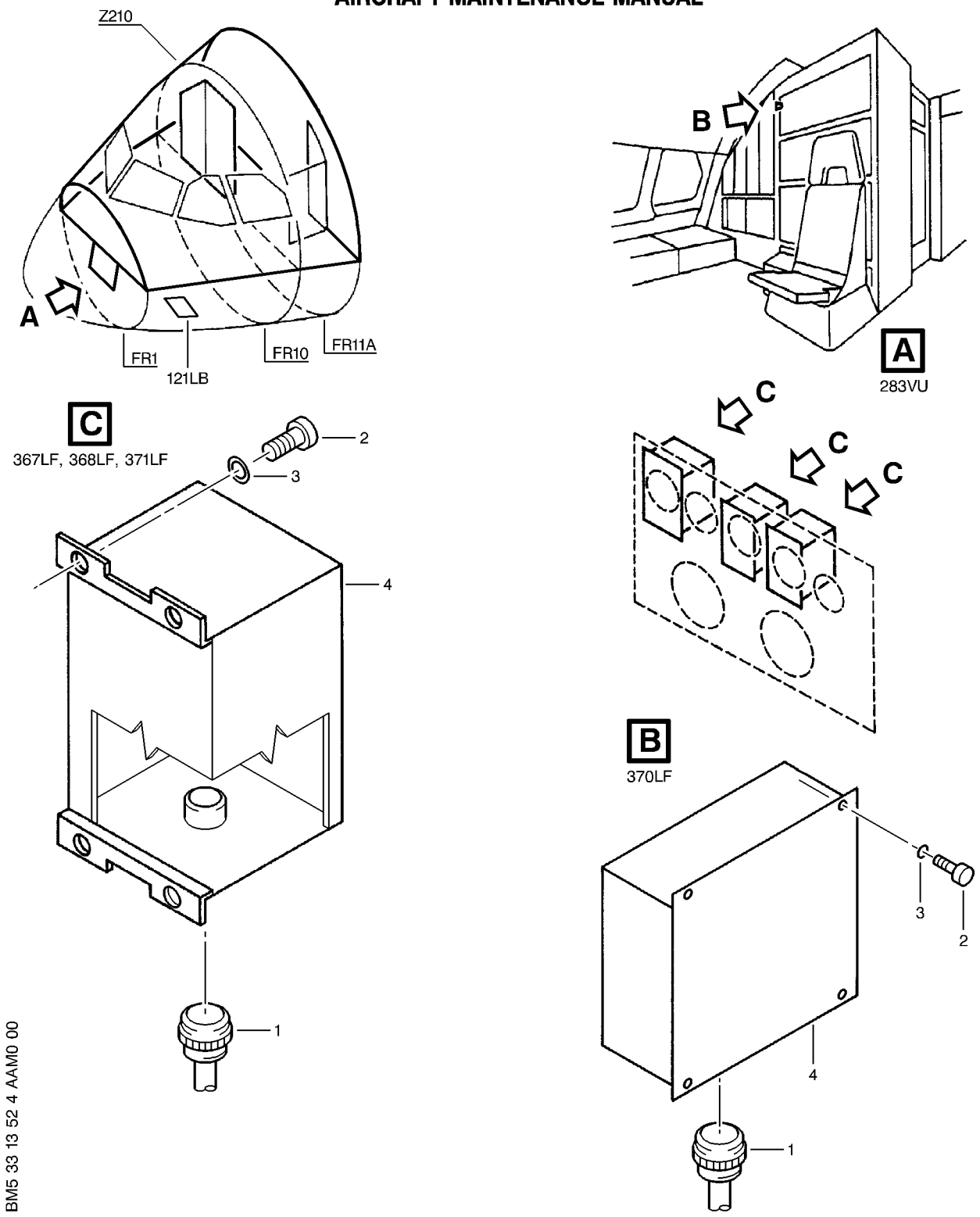
(3)Put and hold lighting controller (4) in the correct position.

(4)Install washers (3) and screws (2).

(5)Remove blanking cap from electrical connector (1).

(6)Connect electrical connector (1) to lighting controller (4).

(7)Carry out an operational test of the lighting controller (Ref. 33-13-00, P.Block 501).



Lighting Controller
Figure 401

D. Close-Up
(1)Remove safety clips and tags and close circuit breakers 1LF and 3LF.
(2)De-energize aircraft electrical network (Ref. 24-41-00, P. Block 301).
(3)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(4)Close access door 121BL.

ANNUNCIATOR LIGHT TEST - DESCRIPTION AND OPERATION

1. General

The annunciator light test (RALTU) is an automatic test system for the flight compartment annunciator lights.

2. Component Location

(Ref. Fig. 001)

Unit (RALTU) - Component Location

R **ON A/C 101-200,

R Post SB 33-2046 For A/C 101-200,

R (Ref. Fig. 002)

R Unit (RALTU) - Component Location

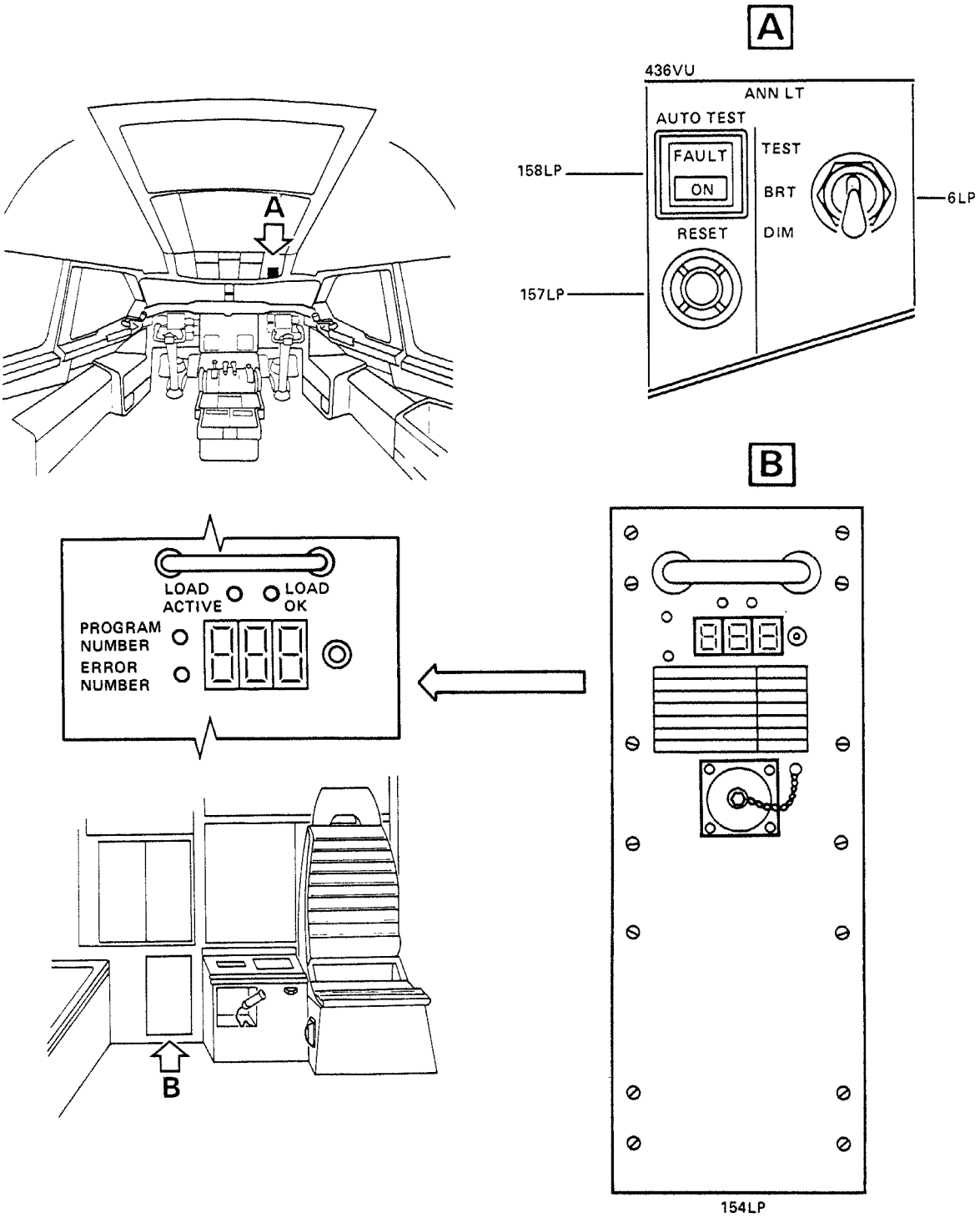
R **ON A/C ALL

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF.
6LP	SWITCH - ANN LT/TEST/BRT/DIM	436VU	210		
154LP	TEST UNIT - REPROGRAMMABLE ANNUNCIATOR LIGHT	120VU	212		33-14-34
157LP	P/BSW - ANN LT/RESET	436VU	210		
158LP	P/BSW - ANN LT/AUTO TEST	436VU	210		

3. Description

The unit is housed in a rectangular casing.
The face is equipped whith :
- 1 handle
- 3 displays (Soft Number) and (Error Number)
- 4 LEDs
  . load active
  . load O.K.
  . Program Number
  . Error Number
- 1 Pushbutton (display control)
- 1 Connector (Programming)
- 3 labels
  . Error label
  . Permanent label bearing :
    Equipment designation

The back is equipped with six connectors enabling electrical connections.
The components are mounted on 22 cards :
- 2 supply Cards
- 6 Positive Control Cards
- 10 Ground Control Cards



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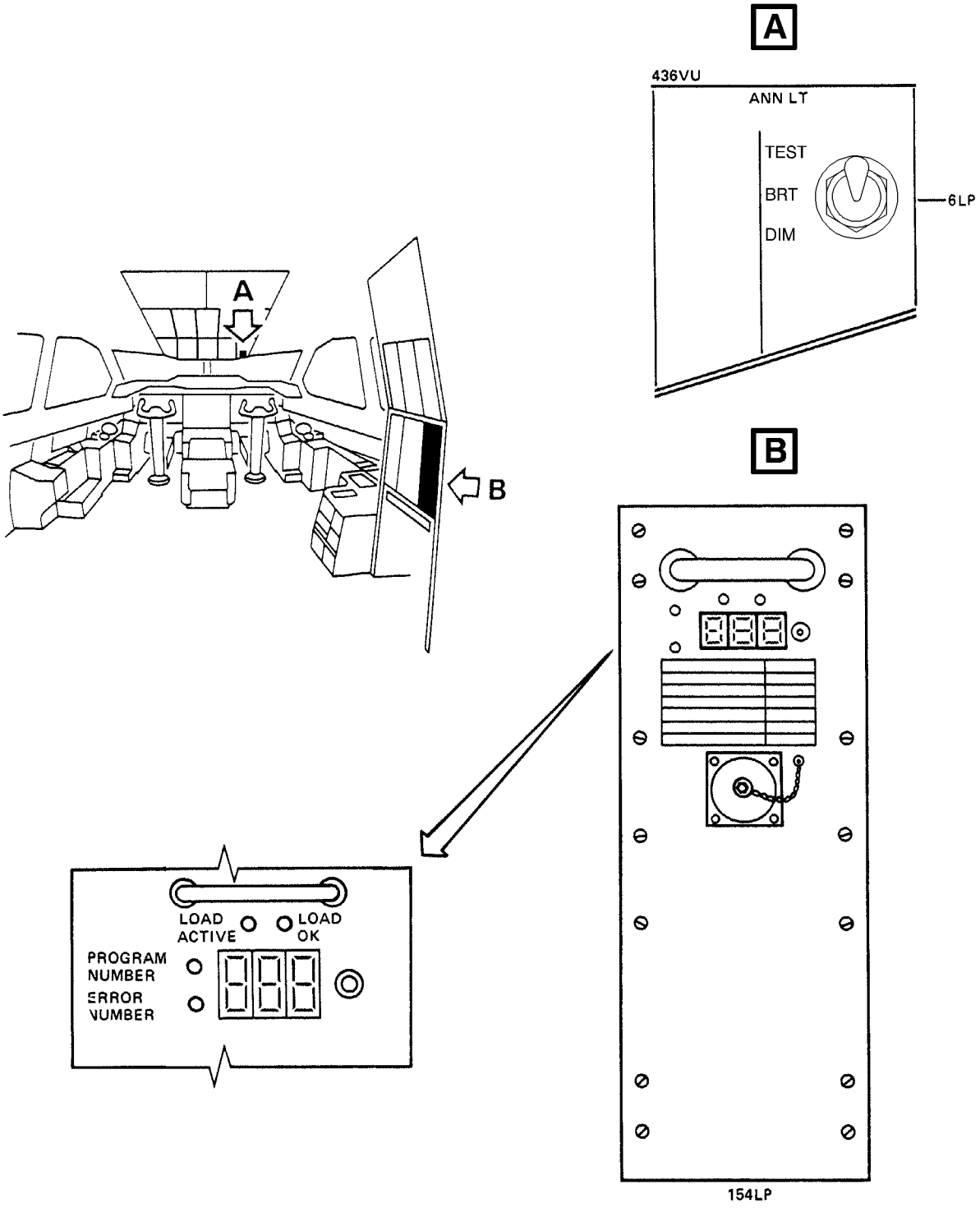
Reprogrammable Annunciator Light Test
Figure 001



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Reprogrammable Annunciator Light Test
Figure 002

R

- 1 Detection Card
- 1 CPU Card — M.C.P.U. module
- 1 Input-Output Card
- 1 Visualization Card

The test system includes a Reprogrammable Annunciator Light Test Unit (RALTU) and controls and indicators.
The RALTU is located on the rear panel.
The control and indicating devices are located on the overhead panel, on panel 436VU, they comprise :
- FAULT/ON illuminated double legend pushbutton switch.
- a RESET pushbutton switch.
- a DIM/BRT/TEST switch

4. Operation

A. Control - Indicating

Automatic test start-up is performed by means of the FAULT/ON magnetic latched illuminated pushbutton switch.
The RESET pushbutton switch permits continuation of the check following indication of defective annunciator lights and an interruption of the test sequence.
The FAULT legend comes on if a fault is detected in the test unit, or if the self-test results are not satisfactory. In this case Automatic test start-up is not performed, only the general test remains operational.
The internal technology of the unit enables updating of flight compartment "Image" software.
The unit can be reprogrammed on aircraft by means of a module which plugs into unit face.
This module contains all the "Image" software versions of all existing flight compartments.

NOTE : The corresponding "Image" is loaded according to pin program.

B. Operation of RALTU

The RALTU is capable of testing the annunciator lights controlled by the 28VDC, the ground or by both simultaneously.
The test can be performed whatever the condition of the annunciator lights (on or off).
The RALTU is controlled by a microprocessor the role of which consists in :
- sequentially illuminating annunciator lights
- detecting defective bulbs
- interrupting the test sequence when a defective bulb is detected
- locating the bulb by illuminating a certain number of annunciator lights around the faulty one.
- permitting continuation of the automatic test by manual action on RESET pushbutton switch.

Faulty annunciator light detection is based on the principle of measurement of the current which passes through them.
All the annunciator lights are connected to the test unit and the test

short circuits the annunciator light system control and diverts current to the test unit.

C. Test Unit Monitoring
The test unit is self-monitored. All faults detected cause the test to be stopped and the FAULT legend to come on. In this case, the general test is still possible.

D. Test of Annunciator Lights not Tested Automatically
Certain items of equipment in the flight compartment possess a test output common to all their annunciator lights.
This characteristic prohibits the automatic testing of their bulbs ; in this case the lights of this equipment will be constantly on throughout the automatic test and checked visually.
During testing, "eights" will be displayed in all display windows, and after a few seconds fuel quantity indicator display, on panel 430VU changes to "sevens".

R **ON A/C 101-200,

R Post SB 33-2046 For A/C 101-200,

R The control and indicating device, located on the overhead panel, on
R panel 436VU consists of a DIM/BRT/TEST switch.

R 4. Operation

R A. Operation of RALTU
R The RALTU is capable of testing in general the annunciator lights
R controlled by the 28VDC.
R The test can be performed whatever the condition of the annunciator
R lights (on or off).

R B. Test of Annunciator Lights not Tested Automatically
R Certain items of equipment in the flight compartment possess a test output
R common to all their annunciator lights.
R During testing, "eights" will be displayed in all display windows, and
R after a few seconds fuel quantity indicator display, on panel 430VU changes
R to "sevens".

R **ON A/C ALL

WINDSHEAR legend will be displayed on the PFDs and WINDSHEAR aural warning will be heard.
NOTE : COLLINS ADF, HF and VHF control panels (if fitted) do not display "eights".
NOTE : OPEN FAULT and CKPT DOOR CONT indicators, located on overhead panel 20VU, are not automatically tested by RALTU.

E. Test Unit Monitoring

(1)Programming
During a request for "Image" software reprogramming, the computer reads the version number on the pin programming.
(2)The "Image" software (soft number) of flight compartment stored in unit can be known on aircraft by means of three displays.
(3)Error numbers are as follows :

ERROR TYPE	ERROR NUMBER
C.P.U Card Failure	001
DETECTION Card Failure	002
I/O E2 PROM Card Failure	003
Wrong Programming	004
Undefined Version	005
No Data Loaded	006

(Ref. Fig. 003, 005)

R **ON A/C 101-200,

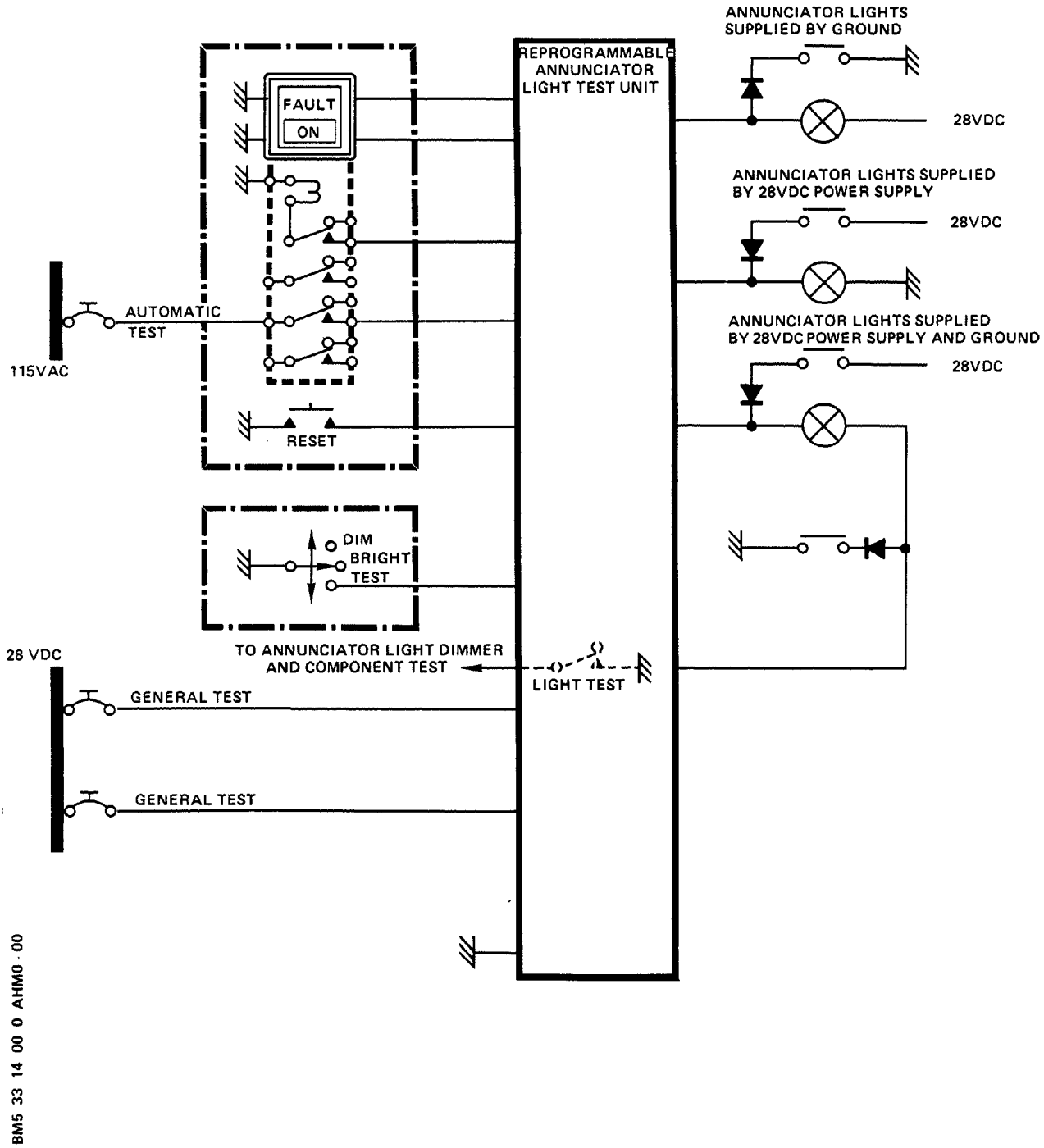
R Post SB 33-2046 For A/C 101-200,

R (Ref. Fig. 004)

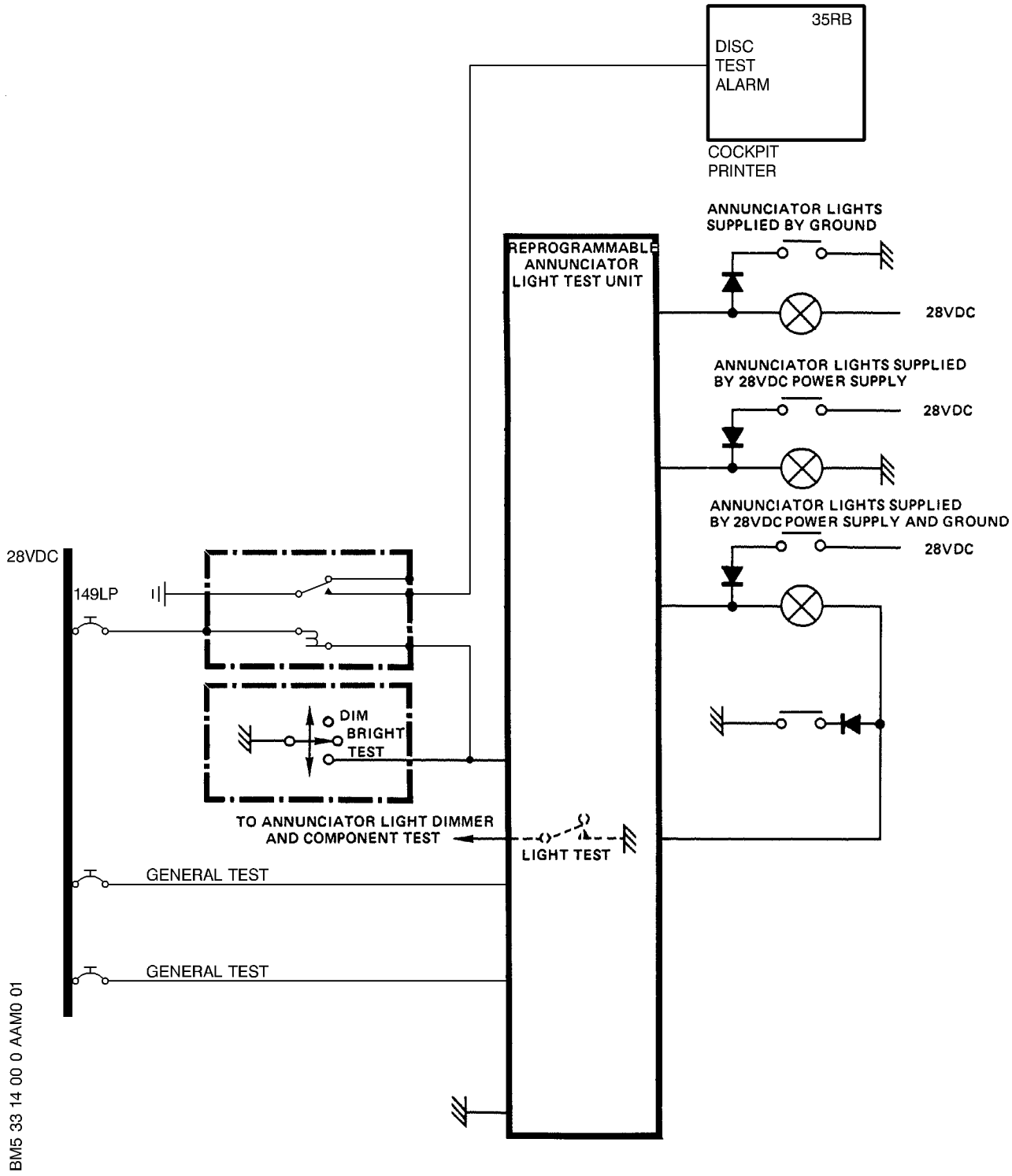
R **ON A/C 101-200,

R Post SB 33-2046 For A/C 101-200,

R (Ref. Fig. 006)

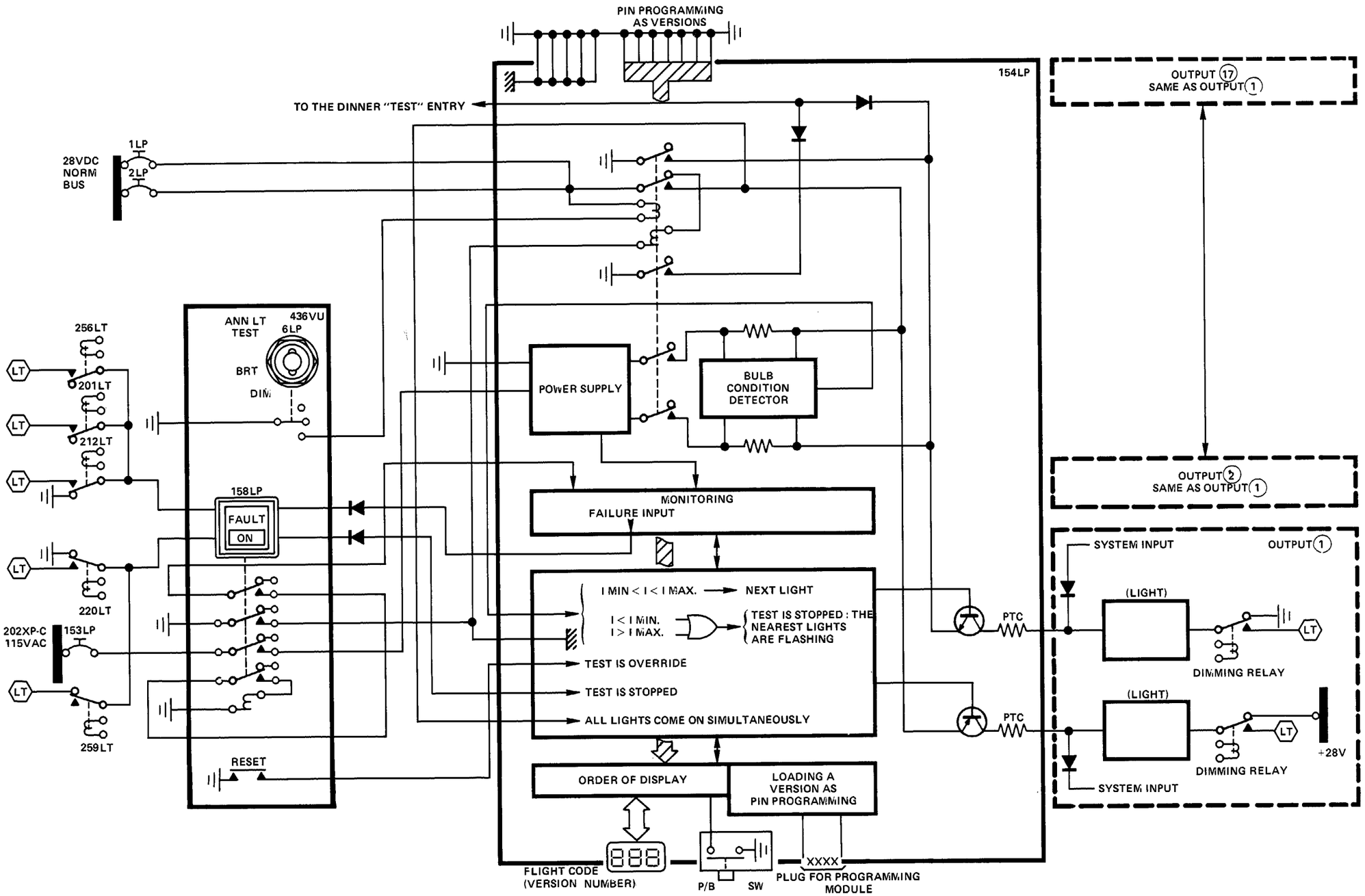


Annunciator Light Test - Simplified Diagram
Figure 003



Annunciator Light Test - Simplified Diagram
Figure 004

R



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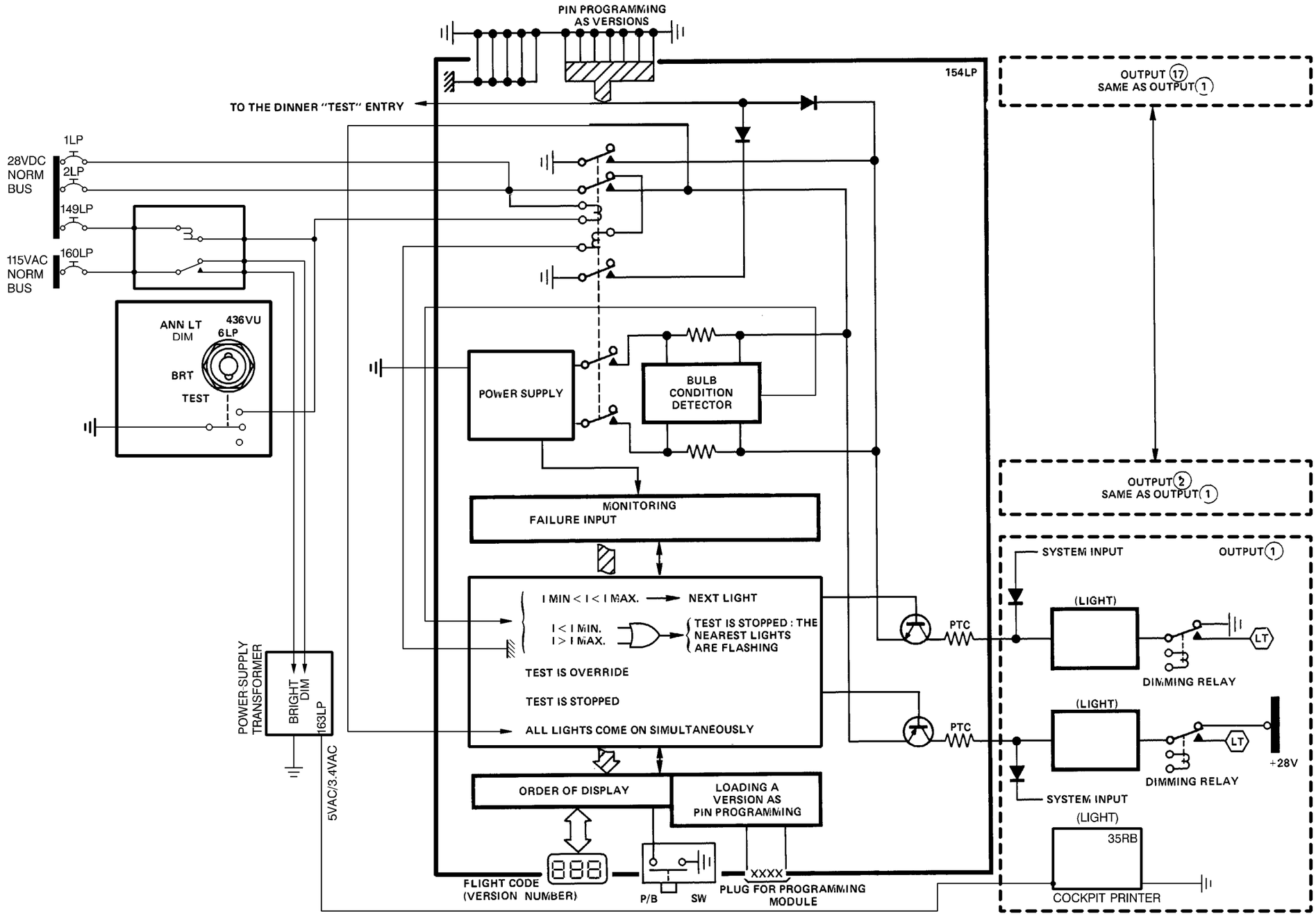
Annunciator Light Test - Schematic Diagram
Figure 005



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Annunciator Light Test - Schematic Diagram
Figure 006

R

1. Reason for the Job

A. The reprogrammable annunciator light test unit (RALTU) can be reprogrammed on aircraft by means of a reprogramming module which plugs into unit face. This reprogramming module contains all the "Image" software versions of all existing flight compartments.

B. RALTU - Programming/Reprogramming

2. Equipment and Materials

ITEM	DESIGNATION
A. 35943X00XYYYZZZ	RALTU Reprogramming Module
B. 359432000YYYZZZ	RALTU Reprogramming Module

R

Referenced Procedures

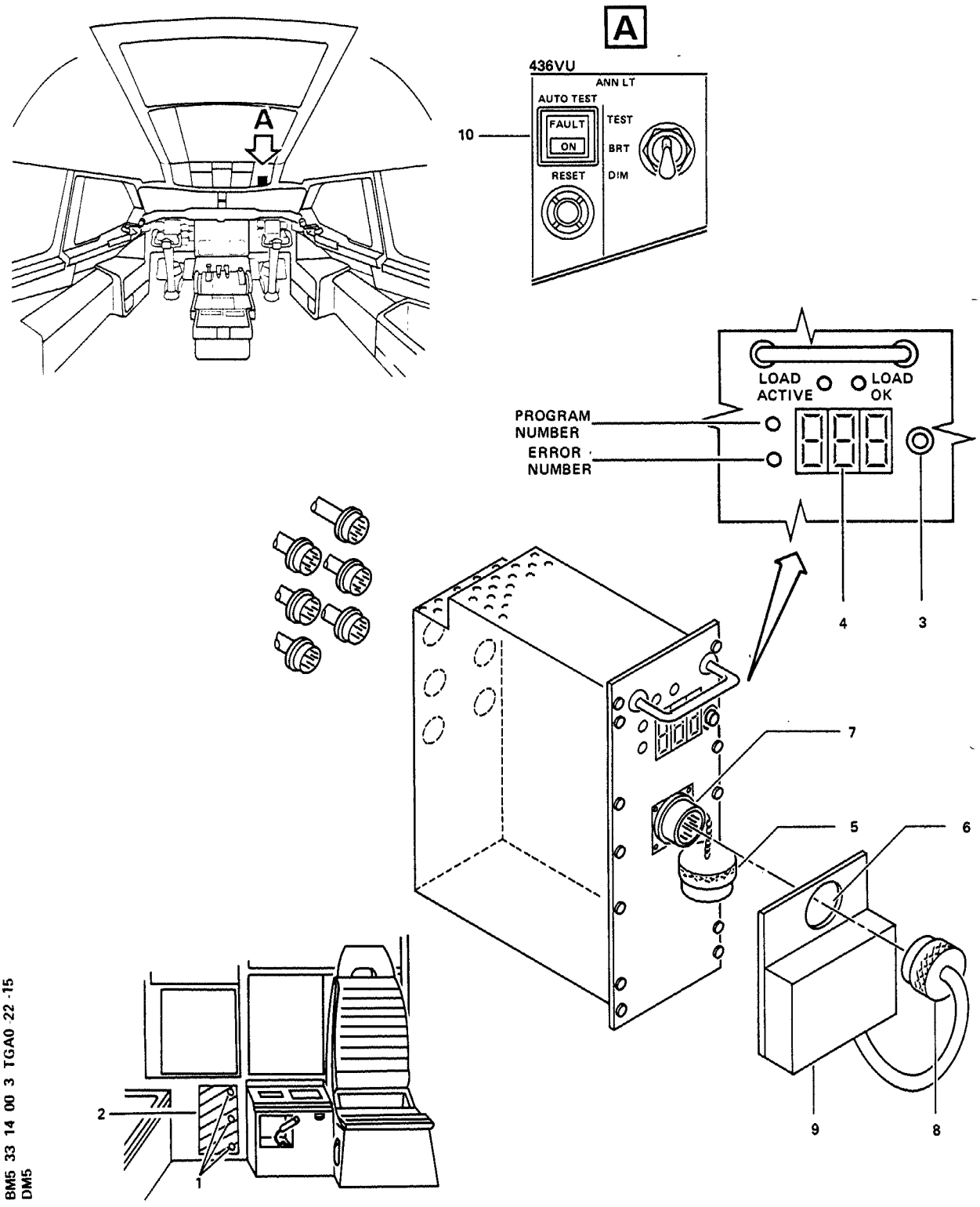
- 24-41-00, P. Block 301	A/C External Power Control
- 33-14-00, P. Block 501	Annunciator Light Test

3. Procedure
(Ref. Fig. 301)

A. Job Set-Up
(1)Energize the aircraft electrical network (Ref. 24-41-00, P. Block 301) ; make certain that electronics racks ventilation is correct.
(2)Make certain that the following circuit breakers are closed :

PANEL	SERVICE	IDENT.	LOCATION
132VU	LIGHTING/INT LT/ANN LT/TEST/MAN	1LP	324/L80
132VU	LIGHTING/INT LT/ANN LT/TEST/MAN	2LP	324/L81
132VU	LIGHTING/INT LT/ANN LT/TEST/MAN	149LP	324/L82
132VU	LIGHTING/INT LT/ANN LT/TEST/AUTO	153LP	323/M83

B. Check
(1)Unlock the 3 quick release fasteners (1).
(2)Open panel (2).
(3)On ANN LT section of panel 436VU, press AUTO TEST pushbutton switch (10).
(4)Press pushbutton switch (3) located on face of RALTU.
R (5)Read program number on display window (4).
NOTE : All the modifications having repercussions on the number of annunciator lights and/or layout in the flight compartment entail reprogramming of RALTU.
R NOTE : In case of a RALTU replacement (without cockpit layout
R modification) when a check of the PROGRAM NUMBER is requested,
R it is the same PROGRAM NUMBER which is displayed on the RALTU.



RALTU - Reprogramming Module
Figure 301

C. Programming
(1)Remove electrical connector protective cap (5).
(2)Slide lug (6) of reprogramming module onto connector (7) located on face of RALTU.
(3)Connect reprogramming module connector (8) to connector (7) located on face of RALTU.
(4)On ANN LT section of panel 436VU, press and release AUTO TEST pushbutton switch (10).
(5)Check that LOAD ACTIVE LED comes on during loading.
(6)After a 3 minutes time delay, LOAD ACTIVE LED goes off ; LOAD OK and PROGRAM NUMBER LEDS come on.
(7)Program number is displayed in display window (4).
NOTE : Any failure during loading is indicated by illumination of ERROR NUMBER light followed by display of failure number. The type of failure will be mentioned in a table located on the face of RALTU.
(8)Disconnect reprogramming module connector (8).
(9)Remove reprogramming module (9).
(10)Install protective cap (5) on electrical connector (7).

D. Test
(Ref. 33-14-00, P. Block 501, para. 1. C. (2), RALTU Operational Test.

E. Close-Up
(1)Close panel (2) and lock quick release fasteners (1).
(2)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(3)De-energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).

R 1. Operational Test

A. Reason for the Job
To initialize manual and automatic annunciator light test

B. Equipment and Materials

ITEM	DESIGNATION
Referenced Procedure - 24-41-00, P. Block 301	AC External Power Control

C. Procedure
(1)Job set-up
(a)Energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(b)Make certain that electronics racks ventilation is correct.
(c)Make certain that the following circuit breakers are closed :

PANEL	SERVICE	IDENT.	LOCATION
132VU	LIGHTING/INT LT/ANN LT/TEST/MAN	1LP	324/L80
132VU	LIGHTING/INT LT/ANN LT/TEST/MAN	2LP	324/L81
132VU	LIGHTING/INT LT/ANN LT/TEST/MAN	149LP	324/L82
132VU	LIGHTING/INT LT/ANN LT/TEST/AUTO	153LP	323/M83

**ON A/C 101-200,

Post SB 33-2046 For A/C 101-200,

PANEL	SERVICE	IDENT.	LOCATION
132VU	LIGHTING/INT LT/ANN LT/TEST/MAN	1LP	324/L80
132VU	LIGHTING/INT LT/ANN LT/TEST/MAN	2LP	324/L81
132VU	LIGHTING/INT LT/ANN LT/TEST/MAN	149LP	324/L82
132VU	LIGHTING/INT LT/ANN LT/TEST/MAN	160LP	325/K84

**ON A/C ALL

(2)Test

ACTION	RESULT
1. On panel 436VU - place ANN LT switch in TEST position - place ANN LT switch in BRT position	All annunciator lights come on on the various panels.

ACTION	RESULT
2. Press AUTO TEST illuminated pushbutton switch	ON legend comes on. Automatic light test is initiated. Pushbutton switch unlatches automatically upon completion of test (or if pressed again to interrupt test)

NOTE 1 : All digital displays show eight and after approximately 16 seconds fuel quantity indicator display on panel 430VU will change to "sevens" indicating that system is healthy.
NOTE 2 : COLLINS ADF, HF and VHF control panels (if fitted) do not display "eights".
NOTE 3 : If a faulty annunciator light is detected during automatic light test, press RESET pushbutton switch to continue test.
NOTE 4 : Annunciator lights not automatically checked remain on permanently.
NOTE 5 : Disregard the CAPT VSI FAULT and F/O VSI FAULT warnings displayed on the left ECAM Display Unit.

R **ON A/C 101-200,

R Post SB 33-2046 For A/C 101-200,

R (2)Test

R ACTION	RESULT
R 1. On panel 436VU R - place ANN LT switch in TEST position R - place ANN LT switch in BRT position	All annunciator lights come on on the various panels.

R **ON A/C ALL

NOTE 6 : Disregard WINDSHEAR aural warning and WINDSHEAR legend displayed on the PFDs (Ref. 22-00-00, P. Block 501).
At end of automatic light test, ON legend goes off

(3)Close-up
(a)De-energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(b)Restore system and aircraft to normal operating condition.

2. Functional Test

A. Reason for the Job

To check for correct operation of faulty lamp location function.

B. Equipment and Materials

ITEM	DESIGNATION
Referenced Procedures	
- 24-41-00, P. Block 301	AC External Power Control
- ESPM 20-45-11	Illuminated Pushbutton Switch

C. Procedure

(1)Job set-up

(a)Energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).

(b)Make certain that electronics racks ventilation is correct.

(c)Make certain that the following circuit breakers are closed :

R **ON A/C 101-200,

R Post SB 33-2046 For A/C 101-200,

R (3)Close-up

R (a)De-energize the aircraft electrical network (Ref. 24-41-00,
R P. Block 301).

R (b)Restore system and aircraft to normal operating condition.

R **ON A/C ALL

PANEL	SERVICE	IDENT.	LOCATION
132VU	LIGHTING/INT LT/ANN LT/TEST/MAN	1LP	324/L80
132VU	LIGHTING/INT LT/ANN LT/TEST/MAN	2LP	324/L81
132VU	LIGHTING/INT LT/ANN LT/TEST/MAN	149LP	324/L82
132VU	LIGHTING/INT LT/ANN LT/TEST/AUTO	153LP	323/M83

(2)Test

ACTION	RESULT
1. On overhead panel, remove one illuminated pushbutton switch (Ref. ESPM 20-45-11) so as to simulate an annunciator light failure	
2. On panel 436VU - press AUTO TEST illuminated pushbutton switch	ON legend comes on. Automatic light test is initiated. Location of faulty lamp is indicated by flashing of a certain number of lights adjacent to the lamp

ACTION	RESULT
	concerned.
- press **RESET** pushbutton switch to continue the test	Automatic test continues. The pushbutton switch unlatches automatically upon completion of test (or if pressed again to interrupt test). **ON** legend goes off at end of test.
3. On overhead panel, install initially removed illuminated pushbutton switch	
4. On panel **436VU** - place **ANN LT** switch in **TEST** position	All annunciator lights come on on the various panels. Check for correct operation of annunciator light installed.

(3)Close-Up
(a)De-energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(b)Restore system and aircraft to normal operating condition.

3. System Test
(Ref. Functional Test)

R REPROGRAMMABLE ANNUNCIATOR LIGHT TEST UNIT - REMOVAL/INSTALLATION

R 1. Reason for the Job

A. Removal/Installation of reprogrammable annunciator light test unit (154LP).

2. Equipment and Materials

ITEM	DESIGNATION
A.	Circuit Breaker Safety Clips
Referenced Procedure	
- 24-41-00, P. Block 301	AC External Power Control
- 33-14-00, P. Block 301	Reprogrammable Annunciator Light Test
- 33-14-00, P. Block 501	Annunciator Light Test

3. Procedure

**ON A/C 101-200,

Post SB 33-2046 For A/C 101-200,

R 1. Reason for the Job

To remove/install Reprogrammable Annunciator Light Test Unit (RALTU)(154LP).

2. Equipment and Materials

ITEM	DESIGNATION
A.	Circuit Breaker Safety Clips
Referenced Procedure	
- 24-41-00, P. Block 301	AC External Power Control
- 33-14-00, P. Block 501	Annunciator Light Test

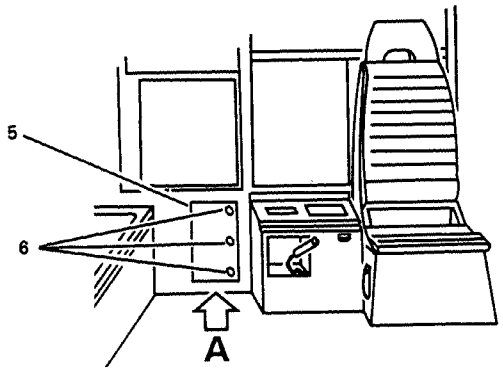
3. Procedure

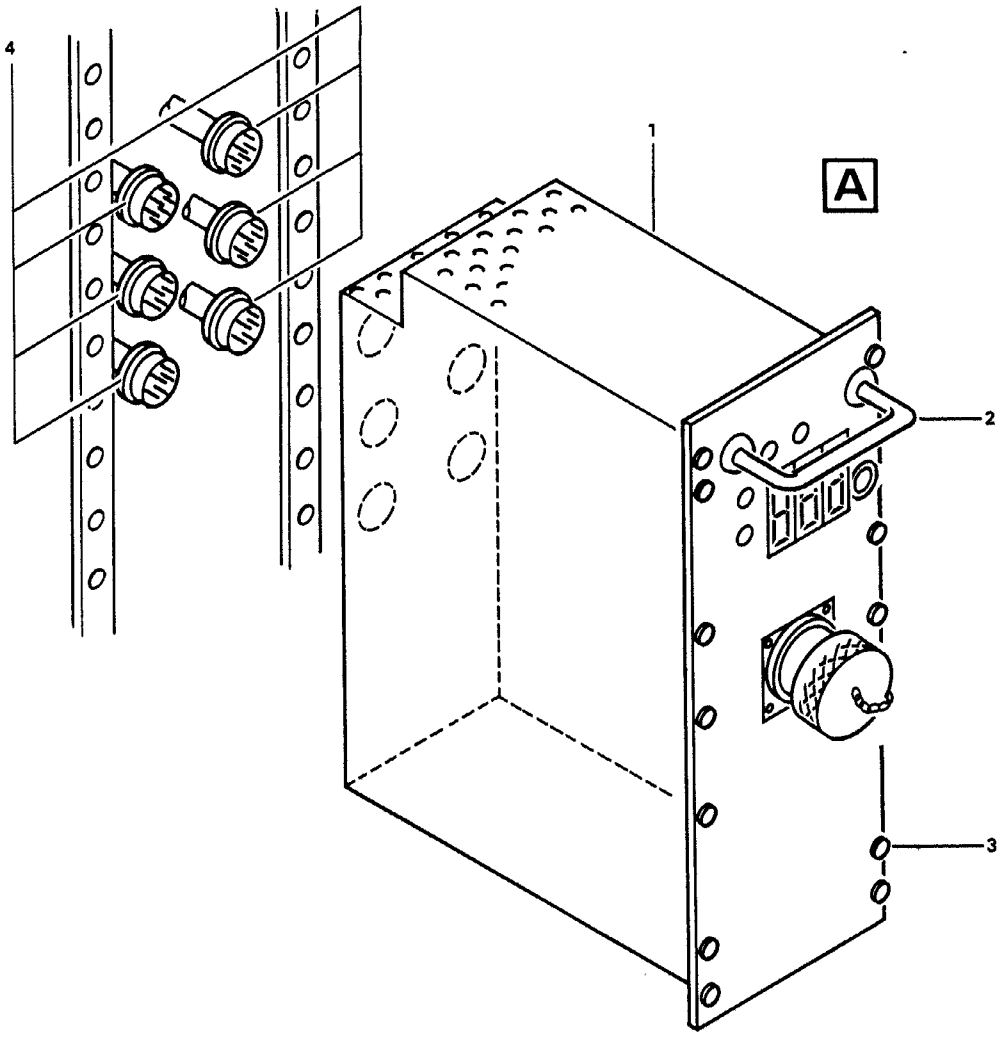
**ON A/C ALL

(Ref. Fig. 401)

A. Job Set-Up
(1)Open, safety and tag the following circuit breakers :

PANEL	SERVICE	IDENT.	LOCATION
132VU	LIGHTING/INT LT/ANN LT/TEST/MAN	1LP	324/L80
132VU	LIGHTING/INT LT/ANN LT/TEST/MAN	2LP	324/L81
132VU	LIGHTING/INT LT/ANN LT/TEST/MAN	149LP	324/L82
132VU	LIGHTING/INT LT/ANN LT/TEST/AUTO	153LP	323/M83





BM5 33 14 34 4 BAM2 22 09
DM5

RALTU - Component Location
Figure 401

B. Removal
(1)Unlock the three quick release fasteners (6).
(2)Open panel (5).
(3)Unlock the fourteen quick release fasteners (3).
(4)Pull RALTU horizontally and carefully with handle (2) from housing so that electrical connectors (4) can be reached.
(5)Disconnect and blank the six electrical connectors (4).
(6)Remove RALTU (1).

**ON A/C 101-200,

Post SB 33-2046 For A/C 101-200,

A. Job Set-Up
(1)Open, safety and tag the following circuit breakers :

PANEL	SERVICE	IDENT.	LOCATION
132VU	LIGHTING/INT LT/ANN LT/TEST/MAN	1LP	324/L80
132VU	LIGHTING/INT LT/ANN LT/TEST/MAN	2LP	324/L81
132VU	LIGHTING/INT LT/ANN LT/TEST/MAN	149LP	324/L82
132VU	LIGHTING/INT LT/ANN LT/TEST/MAN	160LP	325/K84

B. Removal
(1)Unlock the three quick-release fasteners (6).
(2)Open panel (5).
(3)Unlock the fourteen quick-release fasteners (3).
(4)Pull RALTU horizontally and carefully with handle (2) from housing so that electrical connectors (4) can be reached.
(5)Disconnect and blank the six electrical connectors (4).
(6)Remove RALTU (1).

**ON A/C ALL

C. Installation
(1)Clean and inspect RALTU (1) interface and/or adjacent area.
(2)Remove blanking caps and check for correct condition of connectors.
(3)Position RALTU (1) and connect the six electrical connectors (4).
(4)Install RALTU (1) in housing.
(5)Lock the fourteen quick release fasteners (3).
(6)Remove safety clips and tags and close circuit breakers 1LP, 2LP, 149LP and 153LP.

**ON A/C 101-200,

Post SB 33-2046 For A/C 101-200,

C. Installation
(1)Clean and inspect RALTU (1) interface and/or adjacent area.
(2)Remove blanking caps and check for correct condition of connectors.
(3)Position RALTU (1) and connect the six electrical connectors (4).
(4)Install RALTU (1) in housing.
(5)Lock the fourteen quick-release fasteners (3).
R (6)Remove safety clips and tags and close circuit breakers 1LP, 2LP, 149LP and 160LP.

**ON A/C ALL

(7)Close panel (5) and lock quick release fasteners (6).

D. Test
(1)Check for correct programming of Reprogrammable Annunciator Light Test Unit (Ref. 33-14-00, P. Block 301).
(2)Carry out an operational test of Annunciator Light Test Unit (Ref. 33-14-00, P. Block 501).

E. Close-Up
(1)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.

**ON A/C 101-200,

Post SB 33-2046 For A/C 101-200,

D. Test
(1)Carry out an operational test of annunciator light test unit (Ref. 33-14-00, P. Block 501).

E. Close-Up
(1)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.

ANNUNCIATOR LIGHT DIMMING - DESCRIPTION AND OPERATION

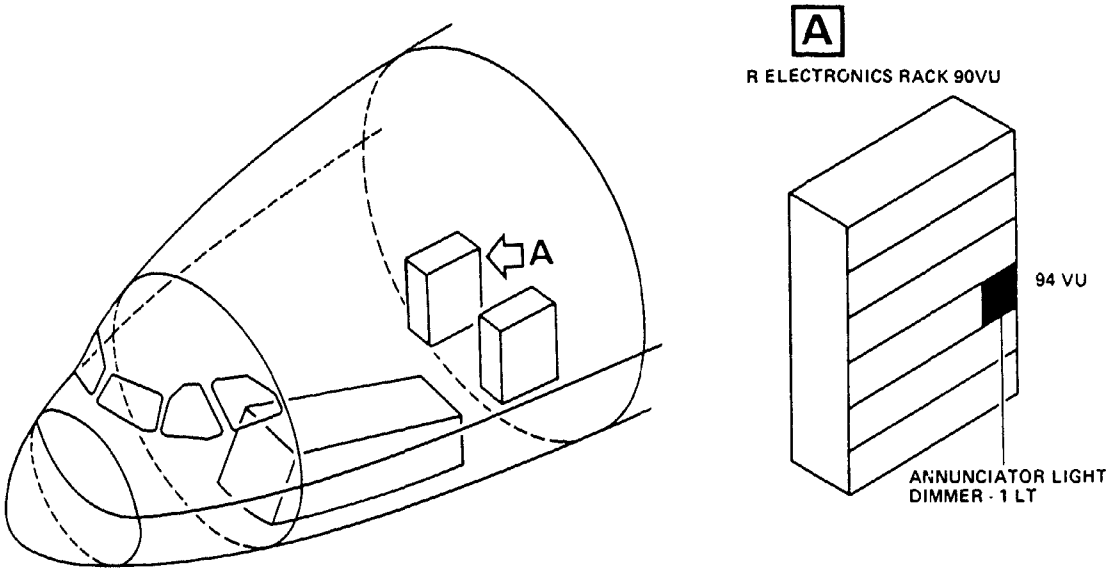
1. General

Annunciator light dimming enables the crew to reduce annunciator light brightness on the instrument panels, center pedestal and overhead panel. The utilization, for the FFCC, of annunciator lights of different colors, determines various voltage levels in DIM mode and in BRT mode, which permits the same lighting visual sensation to be obtained whatever the annunciator light color.

2. Component Location

(Ref. Fig. 001)

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF.
1LT	DIMMER - ANNUNCIATOR LIGHT	94VU	122	121BL	33-16-11
29LT	PHOTORESISTOR CELL - DIM CTL, L	3VU	211		
30LT	PHOTORESISTOR CELL - DIM CTL, R	5VU	212		
6LP	SWITCH - ANN LT/TEST/BRT/DIM	436VU	212		



Annunciator Light Dimming - Component Location
Figure 001

3. Description

The annunciator lights comprise two 0.67W - 28 V bulbs installed in parallel.
The bright and dim modes are controlled by a three position TEST, BRT, DIM switch.
The switch controls the annunciator light dimmer.
The dimmer comprises seven power supply cards consisting of three sections :
- a voltage source which supplies the annunciator lights controlled by the +28 V.
- a voltage source which supplies the annunciator lights controlled by the ground
- a control/monitoring section.

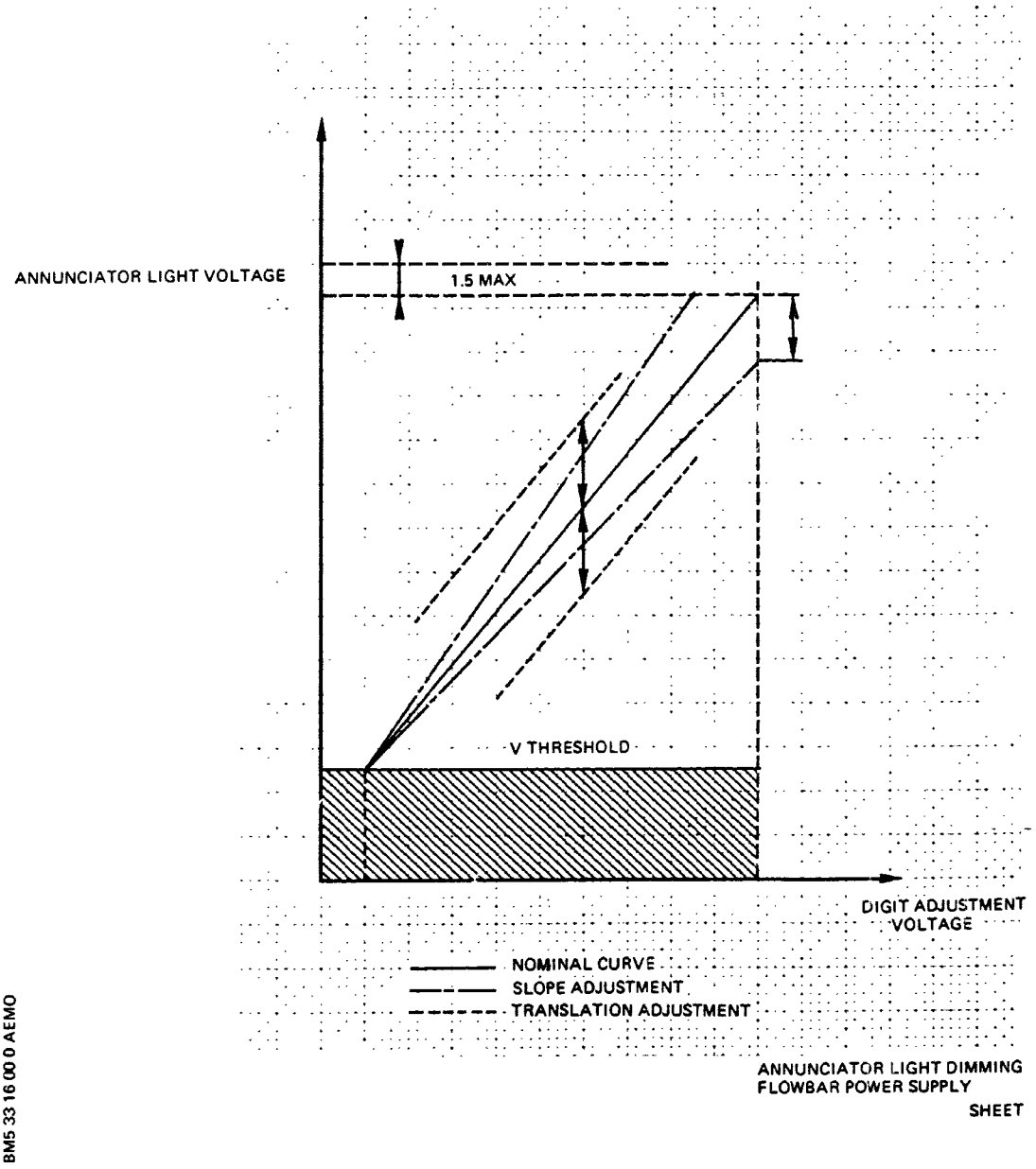
Two other cards ensure supply and connections to the external wiring.
The annunciator light dimmer is supplied with 28 VDC by busbar 101PP through two circuit breakers located on panel 132VU.

4. Operation

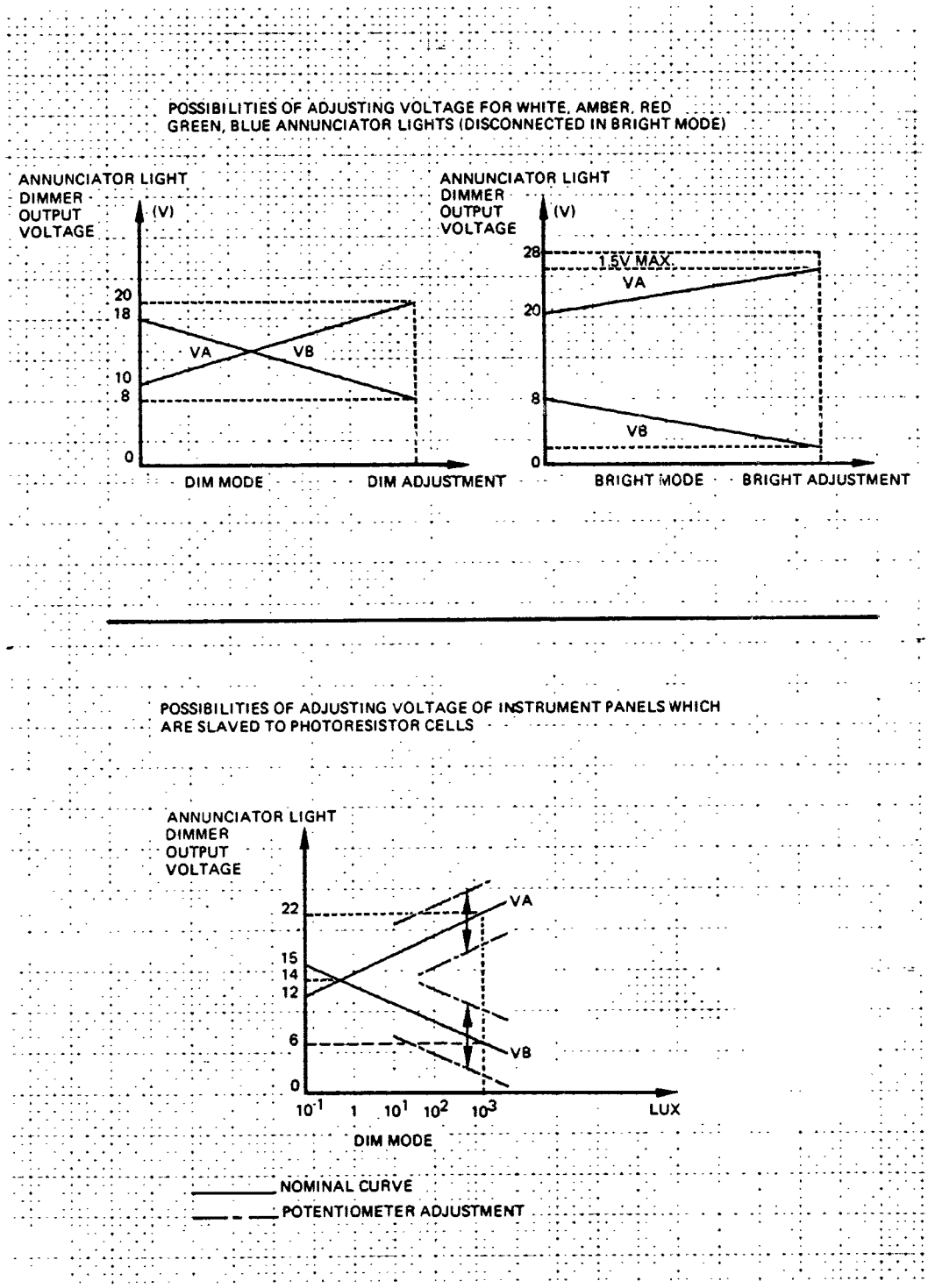
Annunciator light dimming is achieved by voltage variation at the annunciator lights. The dimmer provides this function. The dimmer output voltage levels, therefore those supplied to the annunciator lights, are achieved by 110 Hz voltage pulses : the voltage variation is obtained by pulse with modulation (duty cycle).
The output voltages of each unit are adjustable by potentiometers installed at the electronic cards.
The possibilities of adjustment of DIM and BRT voltage level are given by the curves.

. Flowbar dimming does not depend on the position of DIM, BRT, TEST switch. It depends on the variation of digits which are controlled by a potentiometer located on the center pedestal.
. Dimming of the instrument panel annunciator lights when the switch is placed in DIM position is slaved to flight compartment brightness by means of two photoresistor cells located at the Captain's and First Officer's side of the flight compartment.
  In dim or bright mode the annunciator lights are supplied through relay contacts.
  The relays are located in relay box 490VU on rear panel.
  The dimmer provides power supply and control of relays.
  All the relay contacts are in energized position when TEST, BRT, DIM switch is in BRT or DIM position ; except the relay contacts which supply the instrument panel annunciator lights and blue annunciator lights which are de-energized when the switch is in BRT position.
  When the switch is placed in TEST position, all the relays are de-energized.

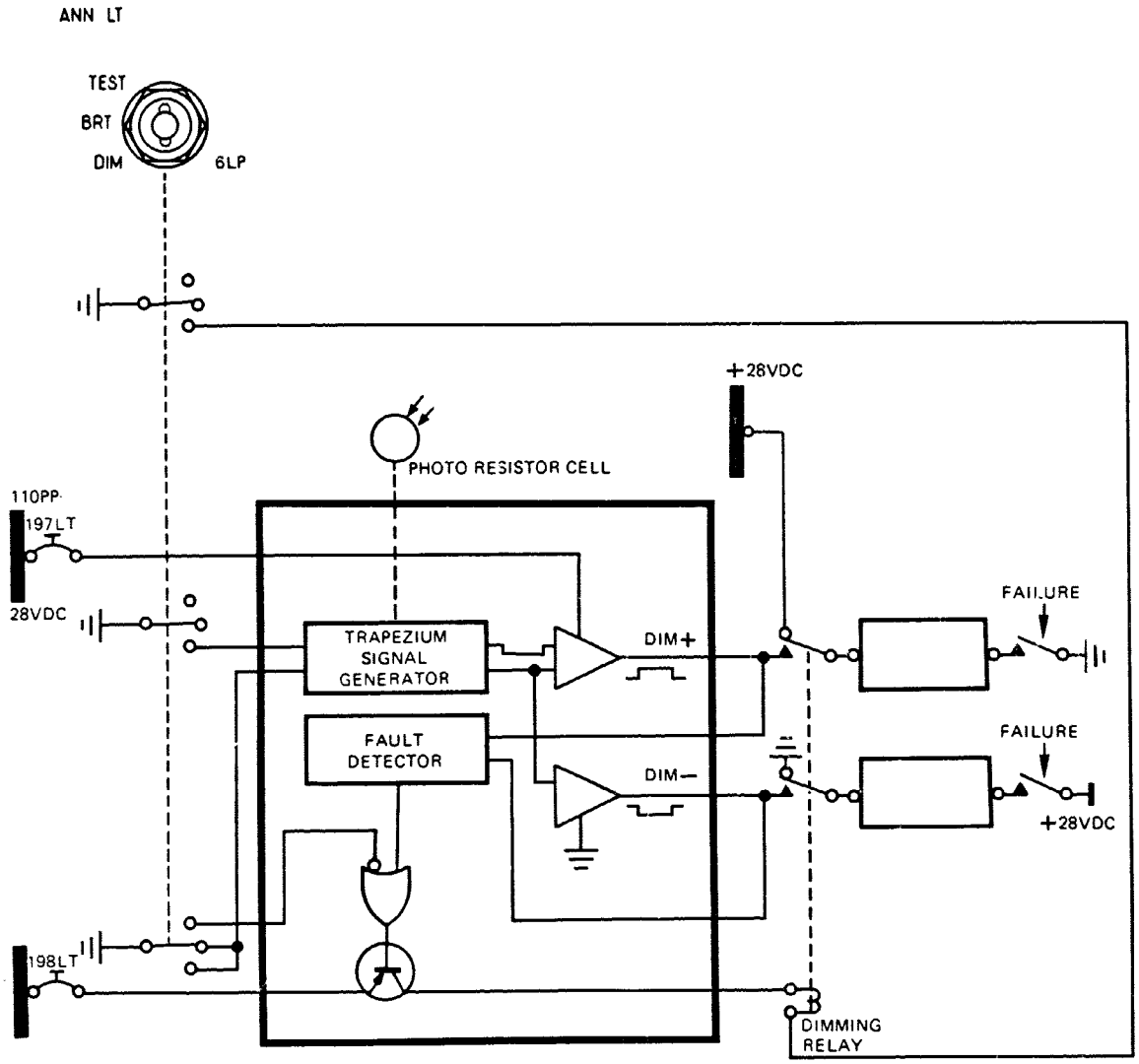
(Ref. Fig. 002)
(Ref. Fig. 003)
(Ref. Fig. 004)
(Ref. Fig. 005)



Annunciator Light Dimmer Power Supply - Curve
Figure 002



Bright and DIM Adjustment - Curve
Figure 003



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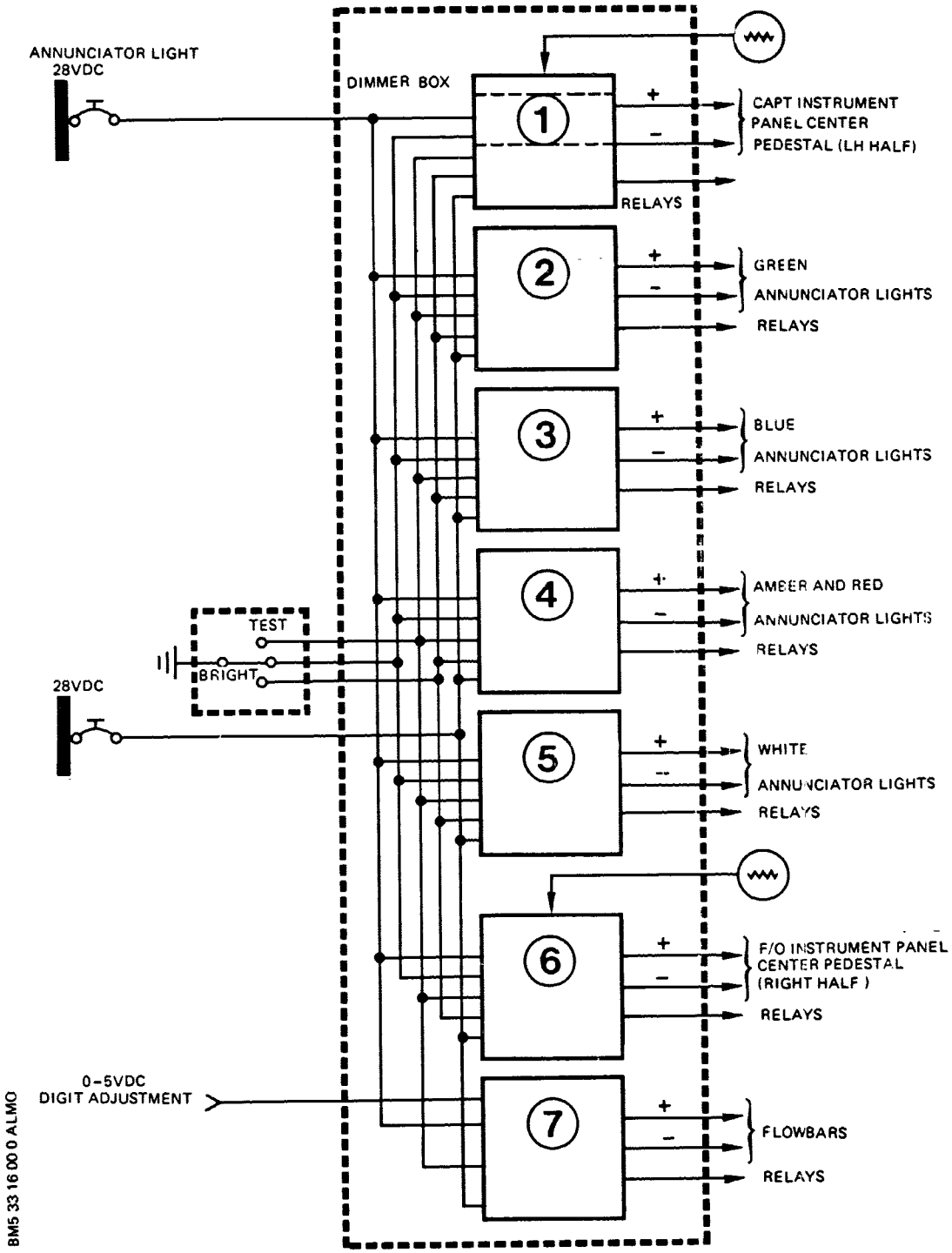
Annunciator Light Dimming - Simplified Diagram
Figure 004



Annunciator Light Dimmer Power Supply - Schematic Diagram
Figure 005

ANNUNCIATOR LIGHT DIMMING - ADJUSTMENT/TEST

1. Operational Test

A. Reason for the Job
To check correct operation of annunciator light dimmer 1LT.

B. Equipment and Materials

ITEM	DESIGNATION
Referenced Procedure - 24-41-00, P. Block 301	AC External Power Control

C. Procedure

(1)Job Set-Up
(a)Energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(b)Make certain that electronics racks ventilation is correct.
(c)Close LIGHTING/INT LT/ANN LT/DIM circuit breakers on panel 132VU.
(d)Illuminate a few annunciator (warning or indicator) lights on Captain, First Officer and center instrument panels, center pedestal, glareshield and overhead panel.

(2)Test

ACTION	RESULT
1. On panel 436VU - place ANN LT switch in BRT position	Annunciator lights come on with maximum brightness on the various panels.
- place ANN LT switch in DIM position	Annunciator lights come on with reduced brightness except on panels 3VU and 5VU
2. On panels 3VU and 5VU Cover the two photo-resistor cells so as to simulate a variation in brightness.	Brightness on Captain, First Officer, and center instrument panels decreases.

(3)Close-up
(a)De-energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(b)Restore system and aircraft to normal operating condition.

2. Functional Test
Ref. Operational Test

3. System Test
Ref. Operational Test

ANNUNCIATOR LIGHT DIMMER - REMOVAL/INSTALLATION

1. Reason for the Job

A. Removal/Installation of annunciator light dimmer unit (1LT).

2. Equipment and Materials

ITEM	DESIGNATION
A.	Circuit Breaker Safety Clips
B.	Blanking Caps
Referenced Procedure - 33-16-00, P. Block 501	Annunciator Light Dimming

3. Procedure

(Ref. Fig. 401)

A. Job Set-Up

(1)Open, safety and tag the following circuit breakers.

PANEL	SERVICE	IDENT.	LOCATION
132VU	LIGHTING/INT LT/ANN LT/TEST/MAN	1LP	324/L80
132VU	LIGHTING/INT LT/ANN LT/TEST/MAN	2LP	324/L81
132VU	LIGHTING/INT LT/ANN LT/TEST/MAN	149LP	324/L82
132VU	LIGHTING/INT LT/ANN LT/TEST/AUTO	153LP	323/M83
132VU	LIGHTING/INT LT/ANN LT/DIM	197LP	324/L84
132VU	LIGHTING/INT LT/ANN LT/DIM	198LP	324/L83

(2)Open access door 121BL and gain access to dimmer unit.

B. Removal

(1)Release dimmer unit attaching nuts (3) and tilt quick-release fasteners downward.
(2)Slide unit (1) out of mount by pulling handle (2).
(3)Cap electrical connectors

C. Preparation of Replacement Component

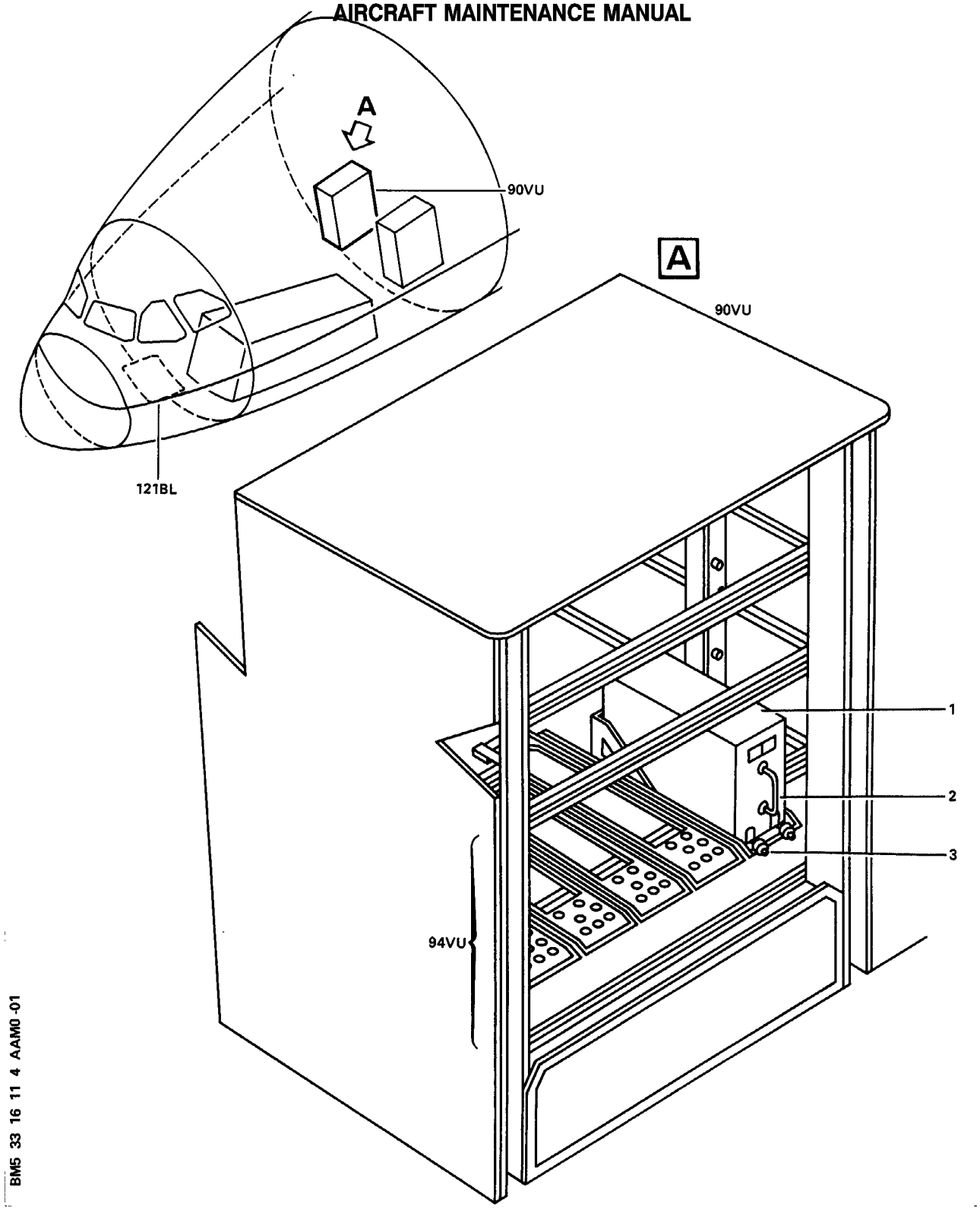
(1)Remove protective cap from connector.
(2)Check that all connector pins are in good condition.

D. Installation

(1)Clean and inspect dimmer unit interface and/or adjacent area.
(2)Slide unit (1) onto mount until connector comes into contact with mount connector.
(3)Push handle (2) to engage the two connectors.
(4)Engage quick-release fasteners and tighten attaching nuts (3).

E. Test

Perform a dimmer unit test (Ref. 33-16-00, P. Block 501).



Annunciator Light Dimmer - Component Location
Figure 401

R

F. Close-Up
(1)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(2)Close access door 121BL.

MEMORIZED FAULT ANNUNCIATORS - DESCRIPTION AND OPERATION

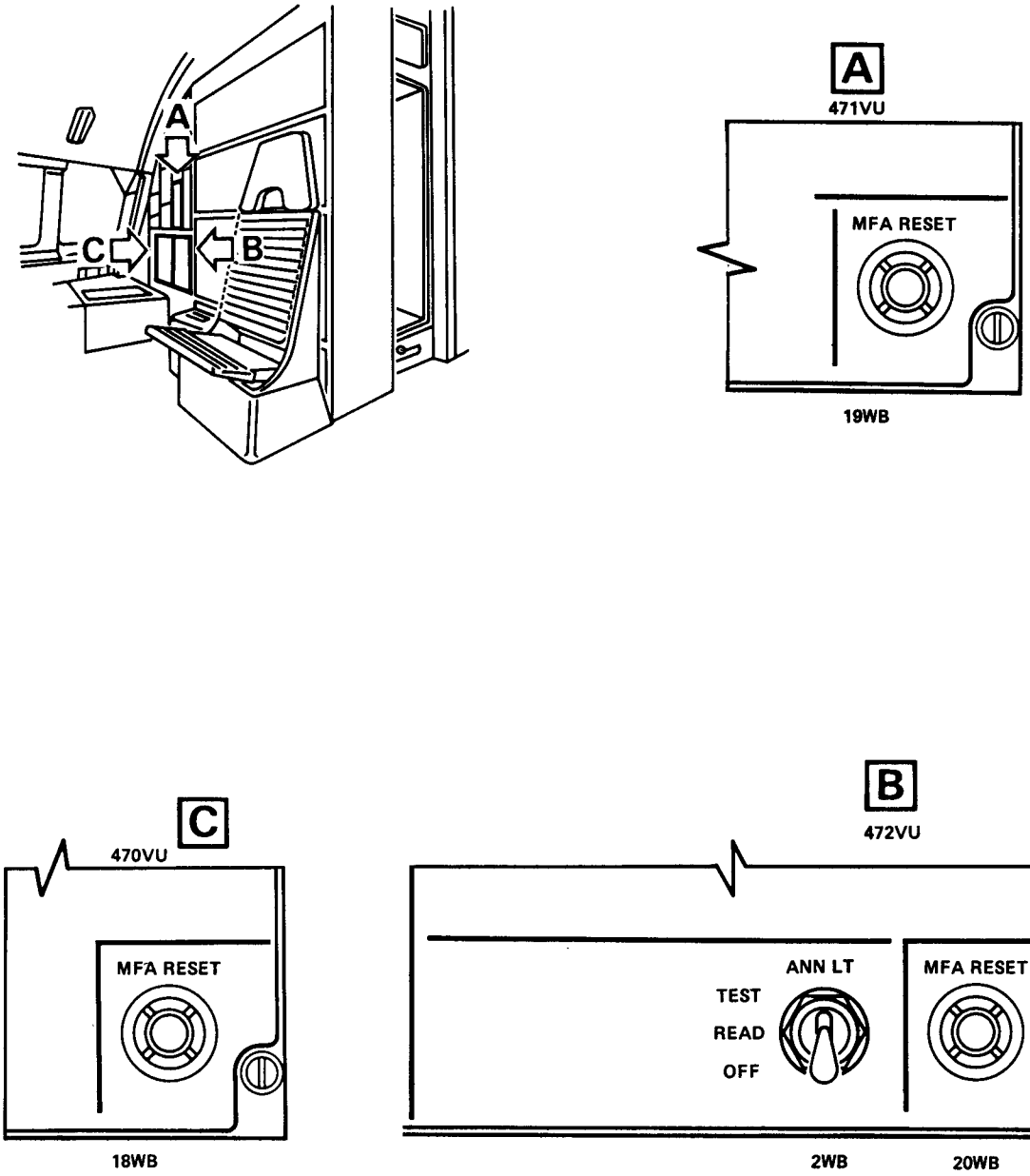
1. General

R The memorized fault annunciators are used to memorize failure information for the maintenance personnel.

2. Component Location

(Ref. Fig. 001)

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF.
2WB	SWITCH - ANN LIGHT	472VU	212		
18WB	P/BSW - MFA RESET	470VU	212		
19WB	P/BSW - MFA RESET	471VU	212		
20WB	P/BSW - MFA RESET	472VU	212		



BM5 33 17 00 0 AFM0 - 01

Memorized Fault Annunciators - Component Location
Figure 001

R

3. Description

(Ref. Fig. 002)

The memorized fault annunciator is an illuminated annunciator light into which a bistable relay is incorporated.

The system comprises :

- a **TEST/READ/OFF** switch on panel **472VU**
- a **MFA RESET** pushbutton switch on panels **470VU, 471VU, 472VU.**

4. Operation

(Ref. Fig. 003)

When **TEST/READ/OFF** switch **(2WB)** located on panel **472VU** is placed in **OFF** position the memorized fault annunciators can detect and memorize any system faults (provided that faults last **0.5** s) and the annunciators are not on.

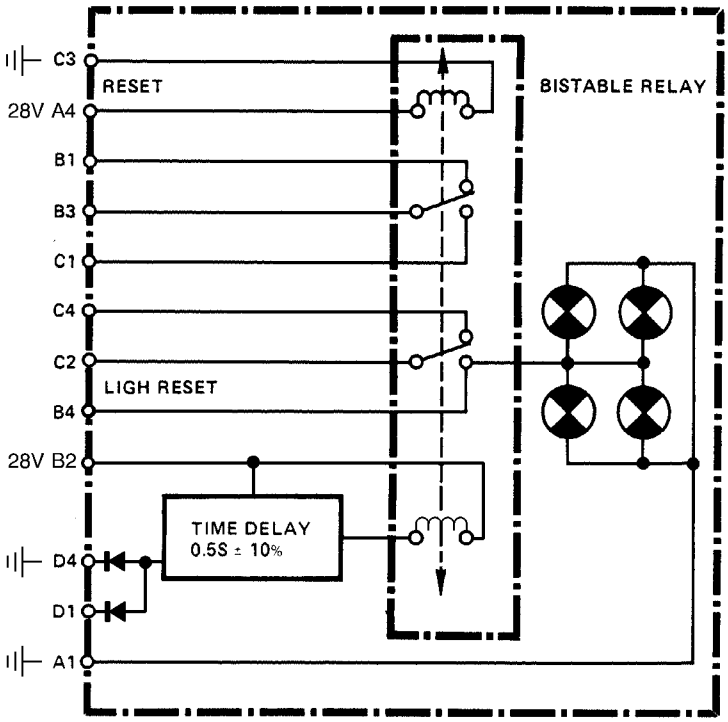
By placing the switch in **READ** position, the annunciators with failure information come on.

By placing the switch in **TEST** position, all the memorized fault annunciators come on.

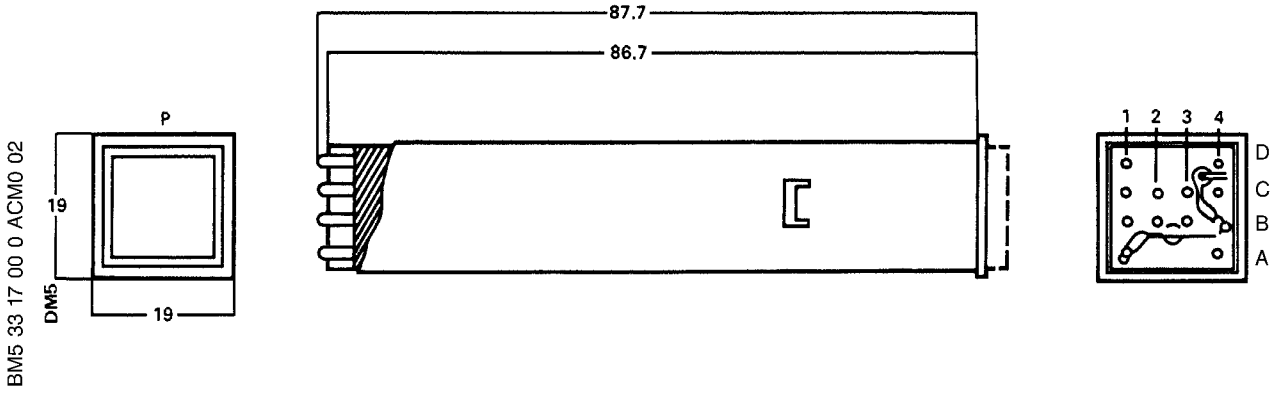
When they are on, in case of failure of the respective system or in case of light test, they can be reset to zero by means of a pushbutton switch which is located on each **VU** panel of the rear panel.

MEMORIZED FAULT ANNUNCIATOR

COMPONENT DESCRIPTION

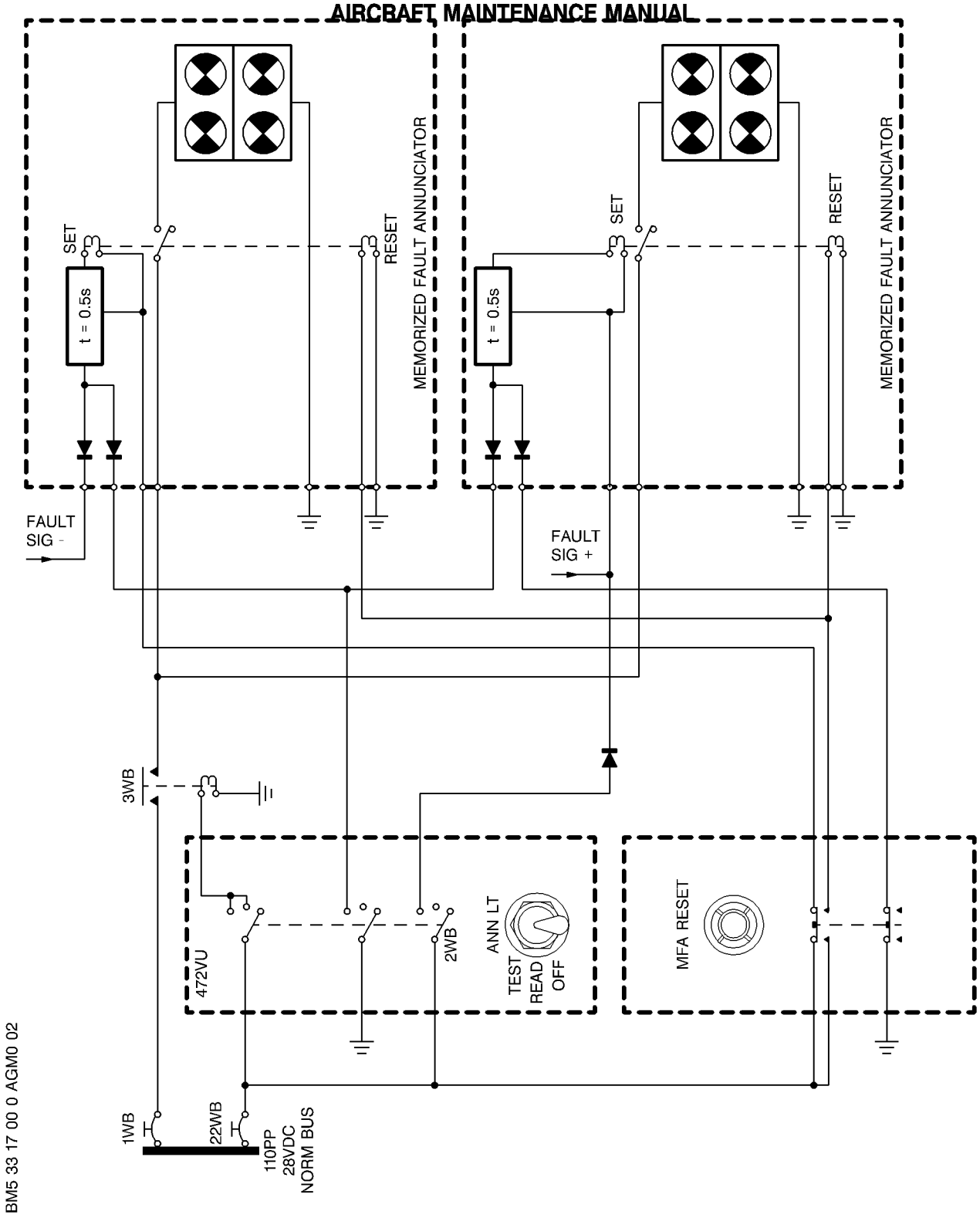


THE MEMORIZED FAULT ANNUNCIATOR COMPRISES :
- A SOCKET
- A BODY
- A CAP WITH FOUR LAMPS
- A BISTABLE RELAY
- SIXTEEN CONTACT PINS



Memorized Fault Annunciator - Component Description
Figure 002

R



Maintenance Magnetic Indicator - Schematic Diagram
Figure 003

R

1. Operational Test

A. Reason for the Job
Activation of memorized fault annunciator test and reset.

B. Equipment and Materials.

ITEM	DESIGNATION
Referenced Procedure - 24-41-00, P. Block 301	AC External Power Control

C. Procedure

(1)Job set-up

(a)Energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).

(b)Make certain that electronics racks ventilation is correct.

(c)Close LIGHTING/MAINT PANEL/ANN & MFA circuit breakers on panel 132VU.

(2)Test

NOTE 1 : Before carrying out test, record MFA's reading by placing TEST/READ/OFF switch 2WB located on panel 472VU in READ position ; if anyone comes on, take appropriate corrective action.

NOTE 2 : This test is to be performed 3 times so as to test the 3 MFA RESET pushbutton switches located on panels 470VU, 471VU and 472VU.

ACTION	RESULT
1. On panel 472VU - place ANN LT switch in TEST position - place ANN LT switch in READ position.	On maintenance panel - memorized fault annunciators come on. - memorized fault annunciators remain on.
2. On panel 470VU (471VU) (472VU) - press MFA RESET pushbutton switch	- all memorized fault annunciators go off.

NOTE : Some memorized fault annunciators may come on again, indicating the status of the system.

3. On panel 472VU - place ANN LT switch in OFF position	- all memorized fault annunciators go off, without exception.

(3)Close-up

(a)Restore system and aircraft to normal operating condition.

(b)De-energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).

1. General

The passenger compartment lighting system is designed to provide adequate general illumination of the passenger compartment, lavatories, galleys and attendant work areas. The system also provides illumination of the passenger lighted signs, the call buttons, used to initiate an attendant call, and the area lights, used to indicate the area from which a call is initiated. High intensity, individual lighting is provided to illuminate the seat area.

2. Description

The passenger compartment lighting system consists of:

R **ON A/C 001-100,

A. General Illumination

The passenger compartment lighting consists of seven strips of fluorescent lamps installed in the stowage compartments and in the ceiling panels. The lamps are supplied with 115 V AC and are controlled from the lighting control panel installed at the purser's station. The three zone lighting is separately controlled and may be switched ON or OFF by pressing P/BSW 'FC 100','YCF 100' or 'YCR 100'. The lamp strips are switched on by pressing the relative P/BSW '1','2' or '3'. The lamp strips can be dimmed to 50 and 10 percent intensity by pressing the corresponding P/BSW.
The entrance area lighting is controlled by the P/BSW 'ENTR' located on the lighting panel. The switching philosophy is the same as that for the passenger compartment lighting. Automatic dimming of the FWD entrance LH occurs whenever the engines are running and the flight compartment door is opened.

R **ON A/C 101-200,

R A. General Illumination
R The passenger compartment lighting consists of seven strips of fluorescent
R lamps installed in the stowage compartments and in the ceiling panels. The
R lamps are supplied with 115 V AC and are controlled from the lighting con-
R trol panel installed at the purser's station. The three zone lighting is
R separately controlled and may be switched ON or OFF by pressing P/BSW 'FC
R 100','BC 100' or 'YC 100'. The lamp strips are switched on by pressing
R the relative P/BSW '1','2' or '3'. The lamp strips can be dimmed to 50 and
R 10 percent intensity by pressing the corresponding P/BSW.
R The FWD entrance, MID galley and AFT galley area lighting is controlled
R separately by the P/BSW 'ENTR 1 100', 'G 2/3 100' and 'G 6/7 100' located
R on the lighting panels at FWD and AFT doors and in galley 3. The switching
R philosophy is the same as that for the passenger compartment lighting.

R **ON A/C 001-100,

(Ref. Fig. 001)

R **ON A/C 101-200,

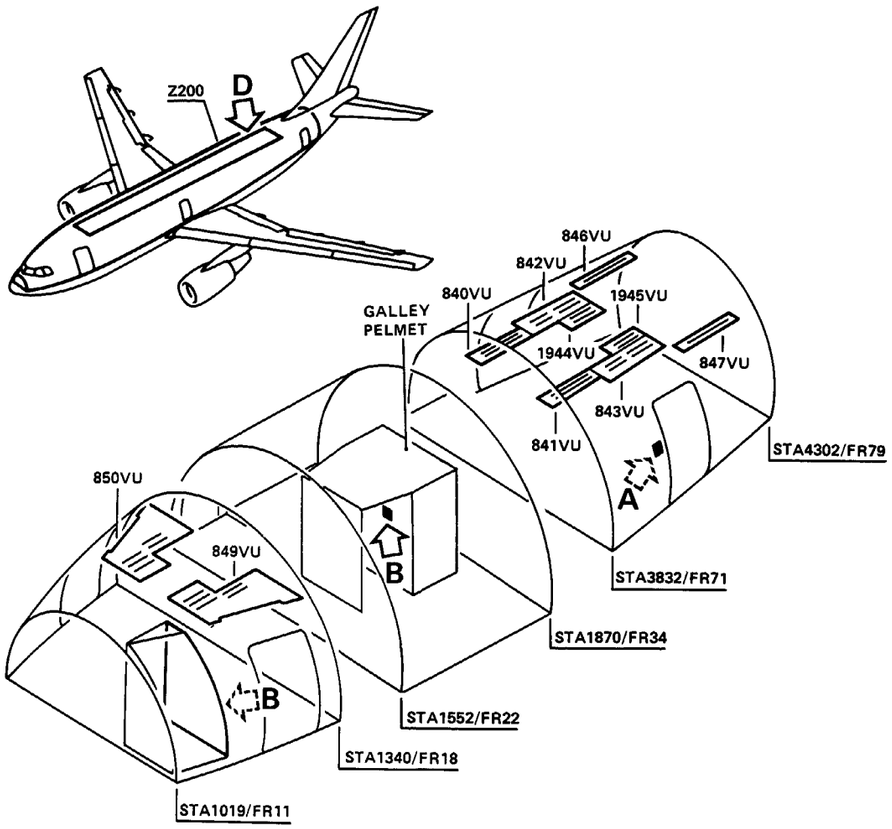
R (Ref. Fig. 002)
(Ref. Fig. 003)

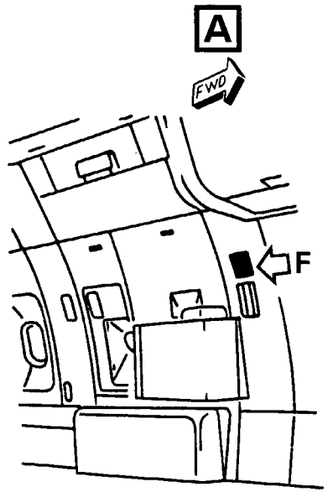
R **ON A/C 001-100,

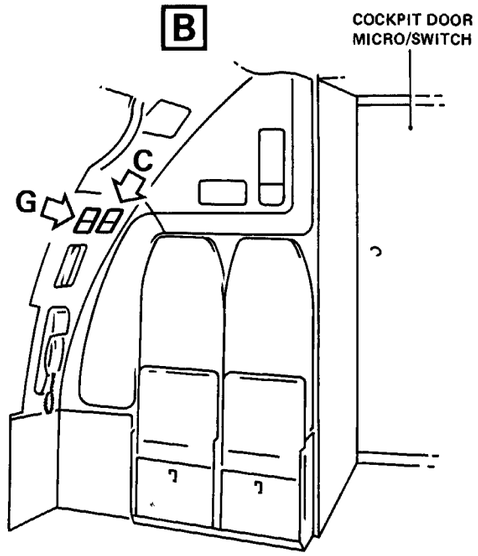
(Ref. Fig. 004)
(Ref. Fig. 005)

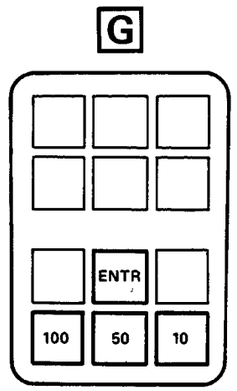
R **ON A/C 101-200,

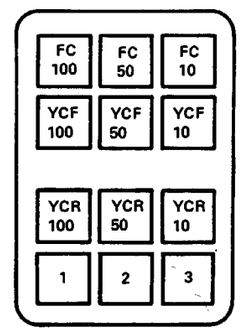
R (Ref. Fig. 006)

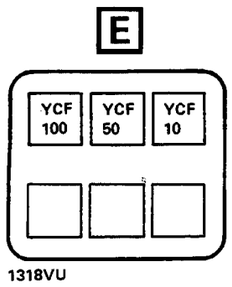


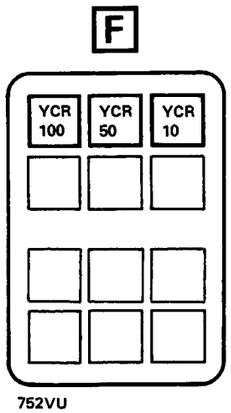


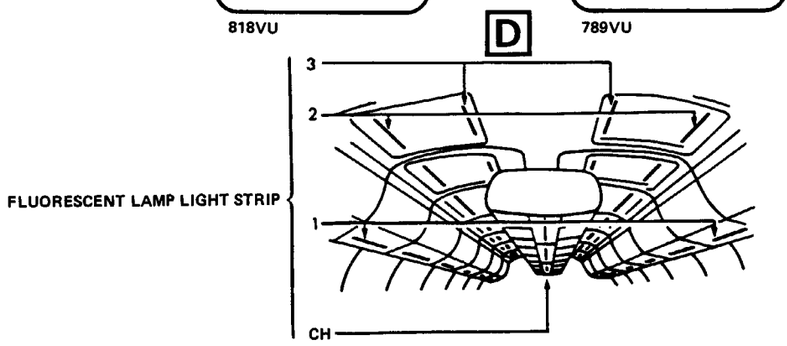












BM6 33 20 00 0 ACKO 00

General Illumination - Component Locations
Figure 001

R EFFECTIVITY: 001-100,

PIA

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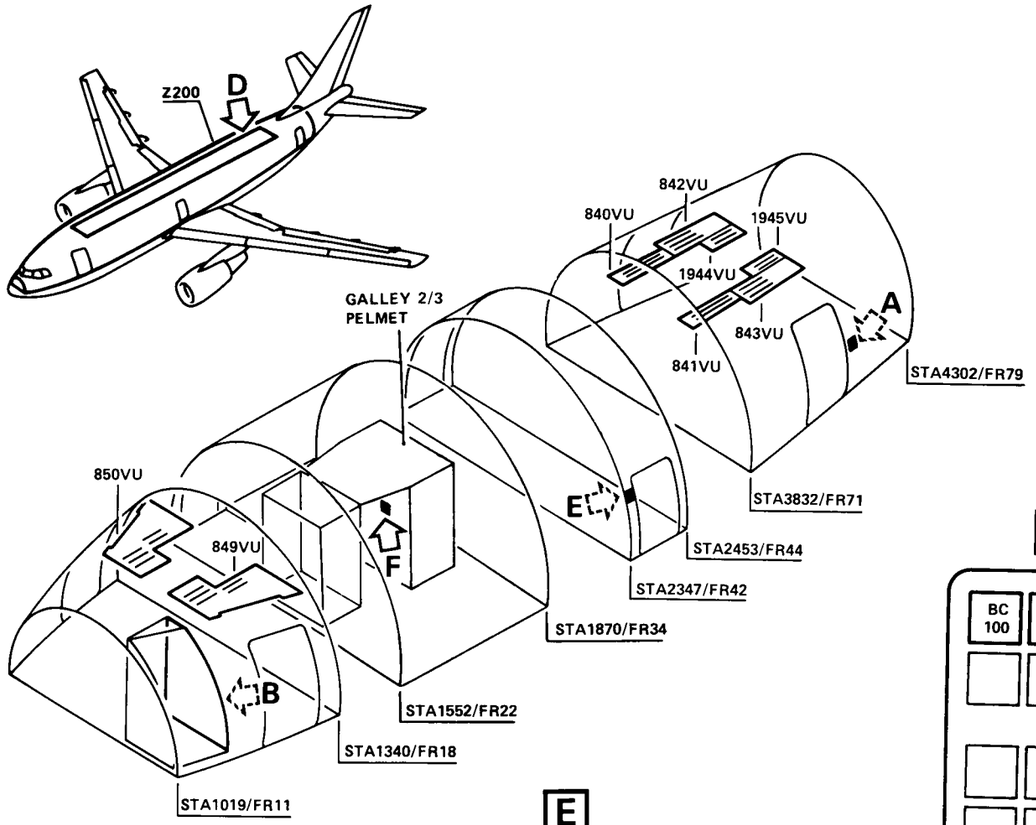
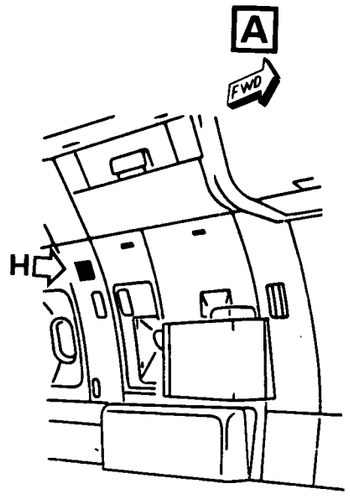
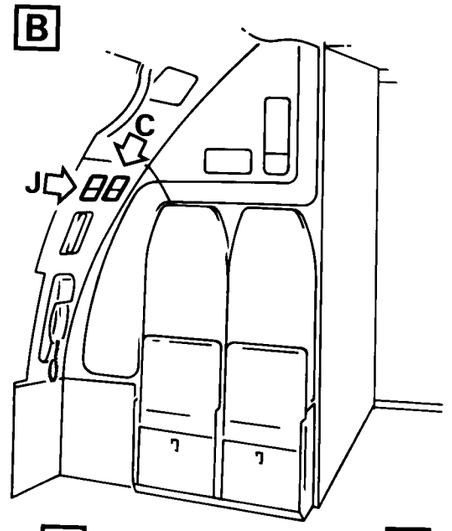
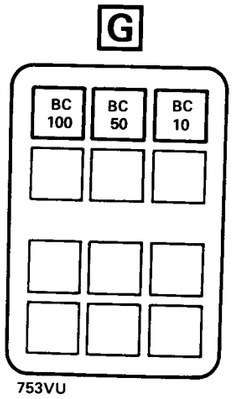
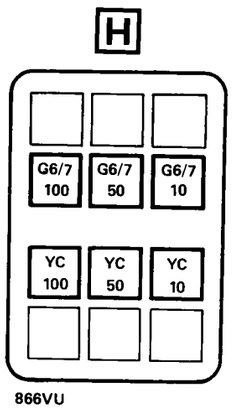
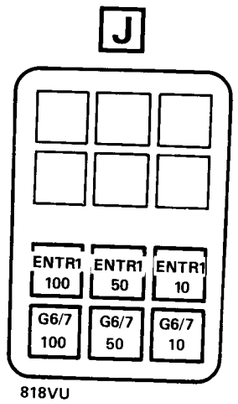


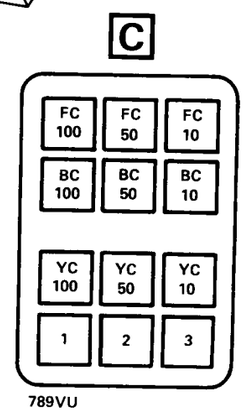


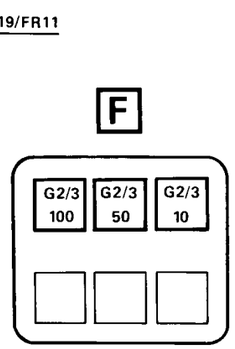


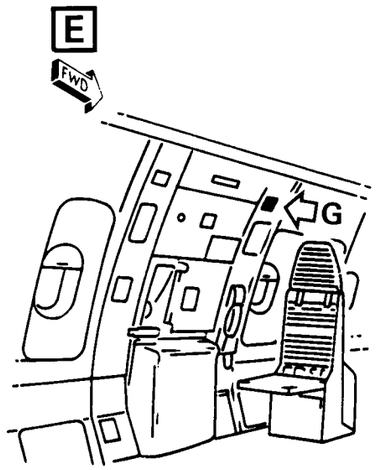


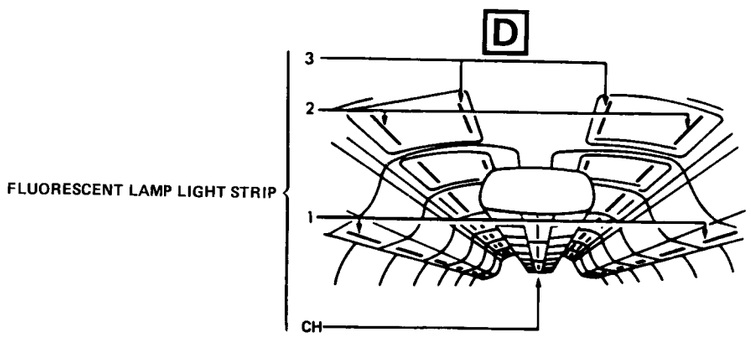








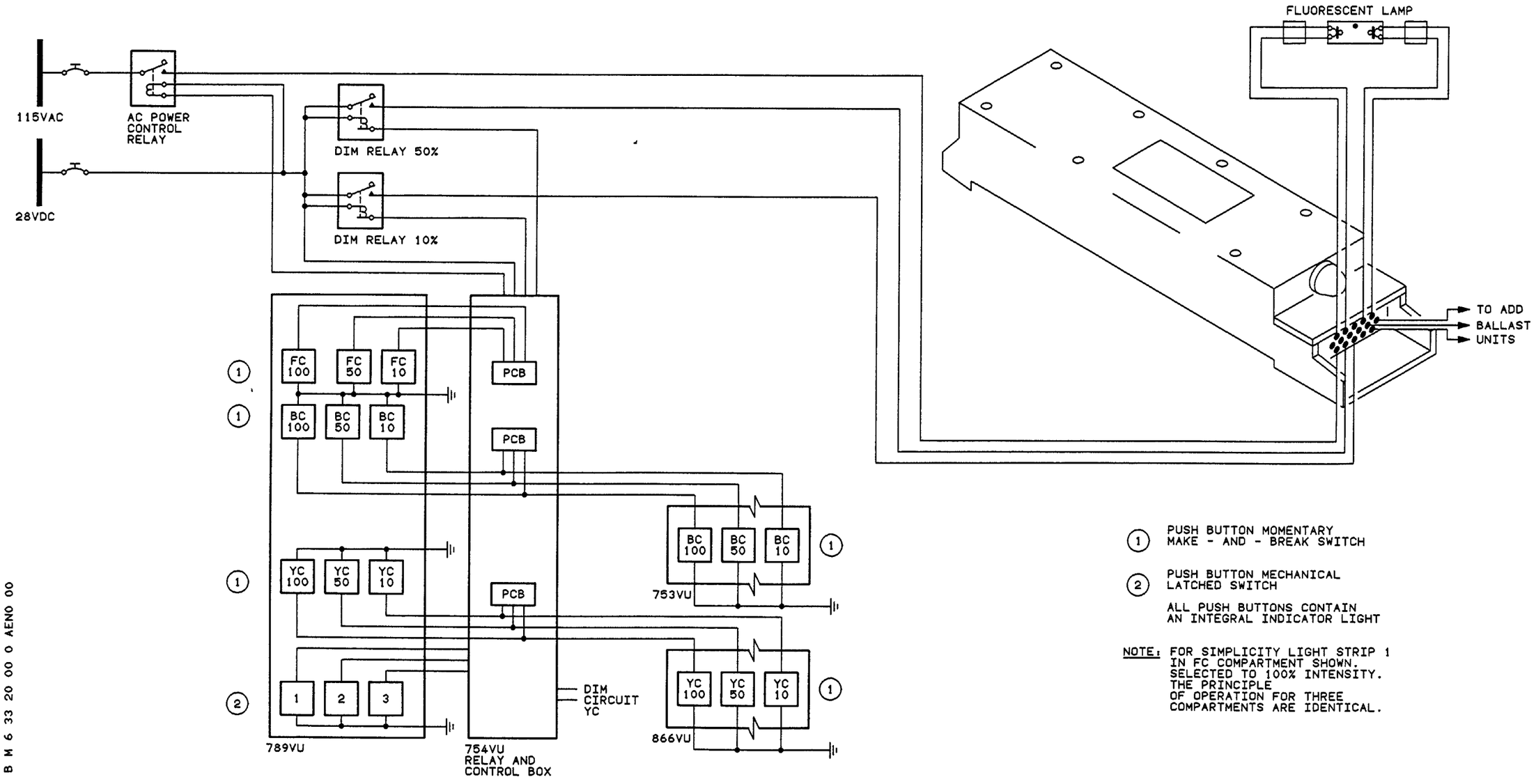




BM6 33 20 00 0 ACZO 00

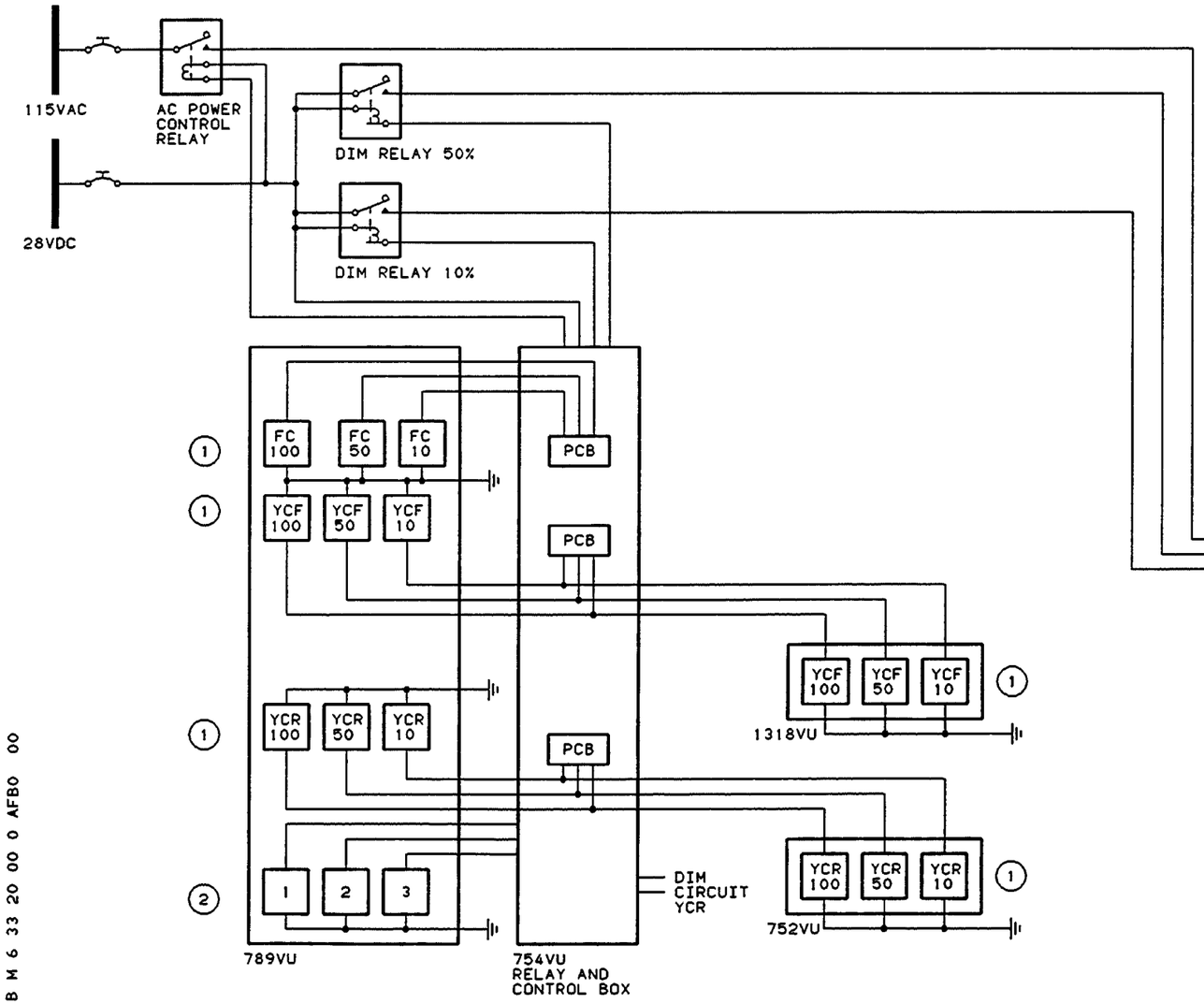
General Illumination - Component Locations
Figure 002

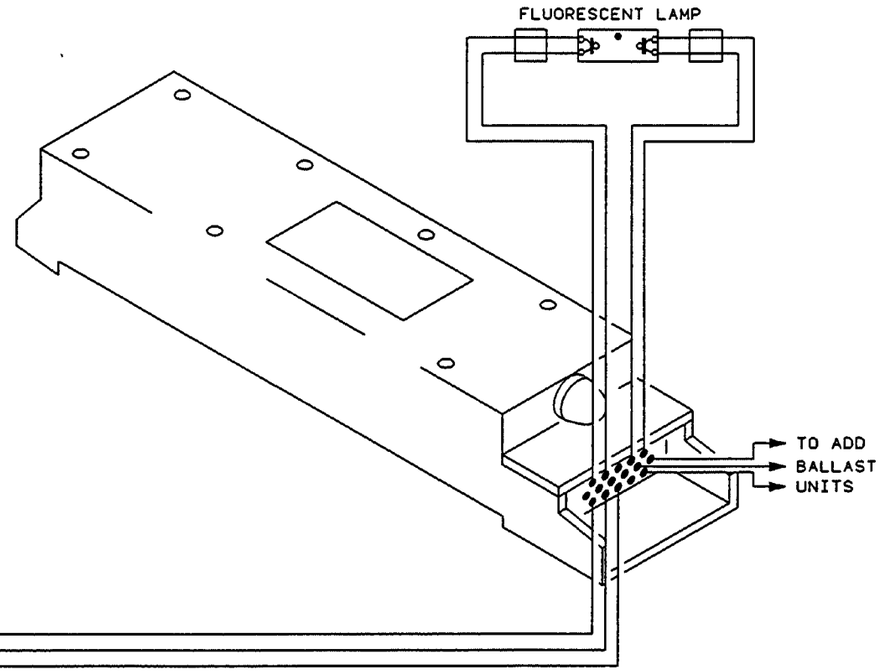
R



B M 6 33 20 00 0 AENO 00

General Illumination - Passenger Compartment
Block Schematic
Figure 003





(1) PUSH BUTTON MOMENTARY MAKE - AND - BREAK SWITCH

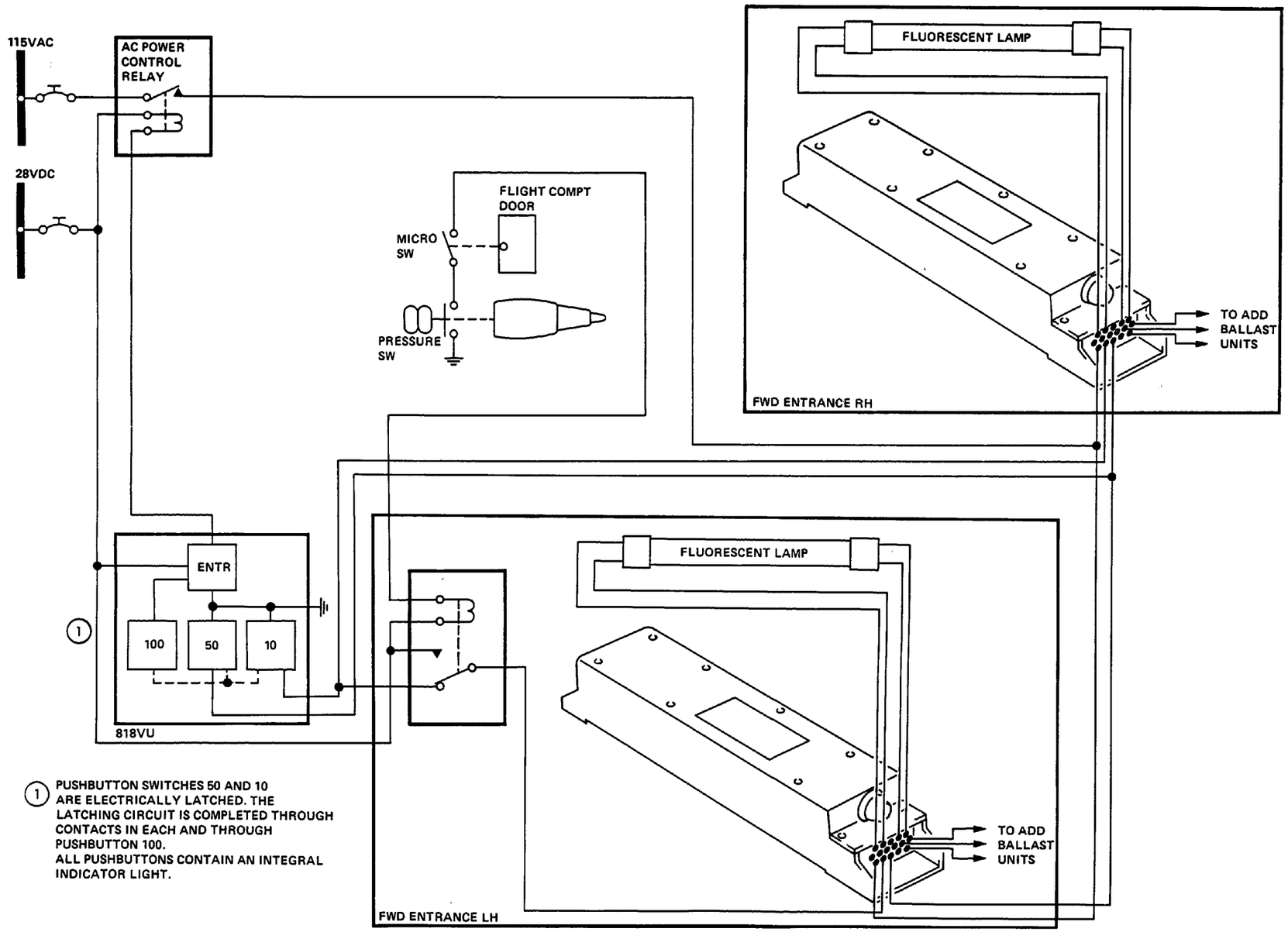
(2) PUSH BUTTON MECHANICAL LATCHED SWITCH

ALL PUSH BUTTONS CONTAIN AN INTEGRAL INDICATOR LIGHT

NOTE FOR SIMPLICITY LIGHT STRIP 1 IN FC COMPARTMENT SHOWN SELECTED TO 100% INTENSITY THE PRINCIPLE OF OPERATION FOR THREE COMPARTMENTS ARE IDENTICAL

B M 6 33 20 00 0 AFB0 00

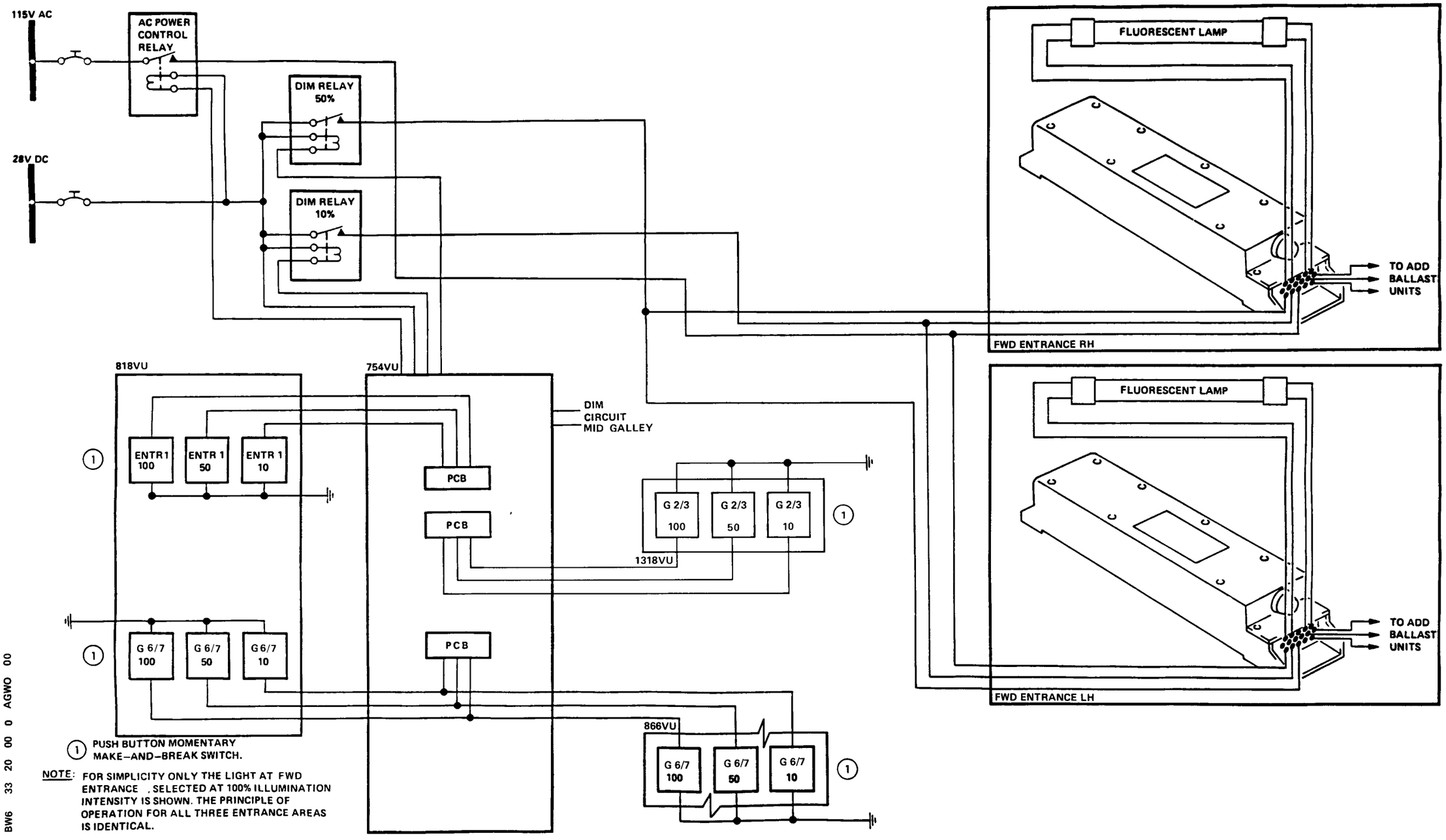
General Illumination - Passenger Compartment
Block Schematic
Figure 004



(1) PUSHBUTTON SWITCHES 50 AND 10 ARE ELECTRICALLY LATCHED. THE LATCHING CIRCUIT IS COMPLETED THROUGH CONTACTS IN EACH AND THROUGH PUSHBUTTON 100.
ALL PUSHBUTTONS CONTAIN AN INTEGRAL INDICATOR LIGHT.

BM6 33 20 00 0 AGBO 00

General Illumination - Entrance Area
Block Schematic
Figure 005



BW6 33 20 00 0 AGWO 00

General Illumination - Entrance Area
Block Schematic
Figure 006

R

R EFFECTIVITY: 101-200,

PIA

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B. Lavatory Lighting
The lavatory lighting system consists of fluorescent lamps installed in each lavatory and controlled by switches fitted on the **FWD** and **AFT** circuit breaker panels. The lamps are supplied with **115 V AC** via a start/ballast unit. The lamps are on at maximum intensity whenever the lavatory doors are closed and locked and the selector switch is on. The lighting reduces to half brightness when the lavatory door is unlocked except for an **AFT** lavatory. This lavatory is for handicapped persons and provides maximum light intensity only.

R **ON A/C 001-100,

B. Lavatory Lighting
The lavatory lighting system consists of fluorescent lamps installed in each lavatory and controlled by switches fitted on the **FWD** and **AFT** circuit breaker panels. The lamps are supplied with **115 V AC** via a start/ballast unit. The lamps are on at maximum intensity whenever the lavatory doors are closed and locked and the selector switch is on. The lighting reduces to half brightness when the lavatory door is unlocked except for two **AFT** lavatories. These lavatories are for handicapped persons and provides maximum light intensity only.

R **ON A/C ALL

C. Passenger Lighted Signs
The passenger lighted signs consist of:

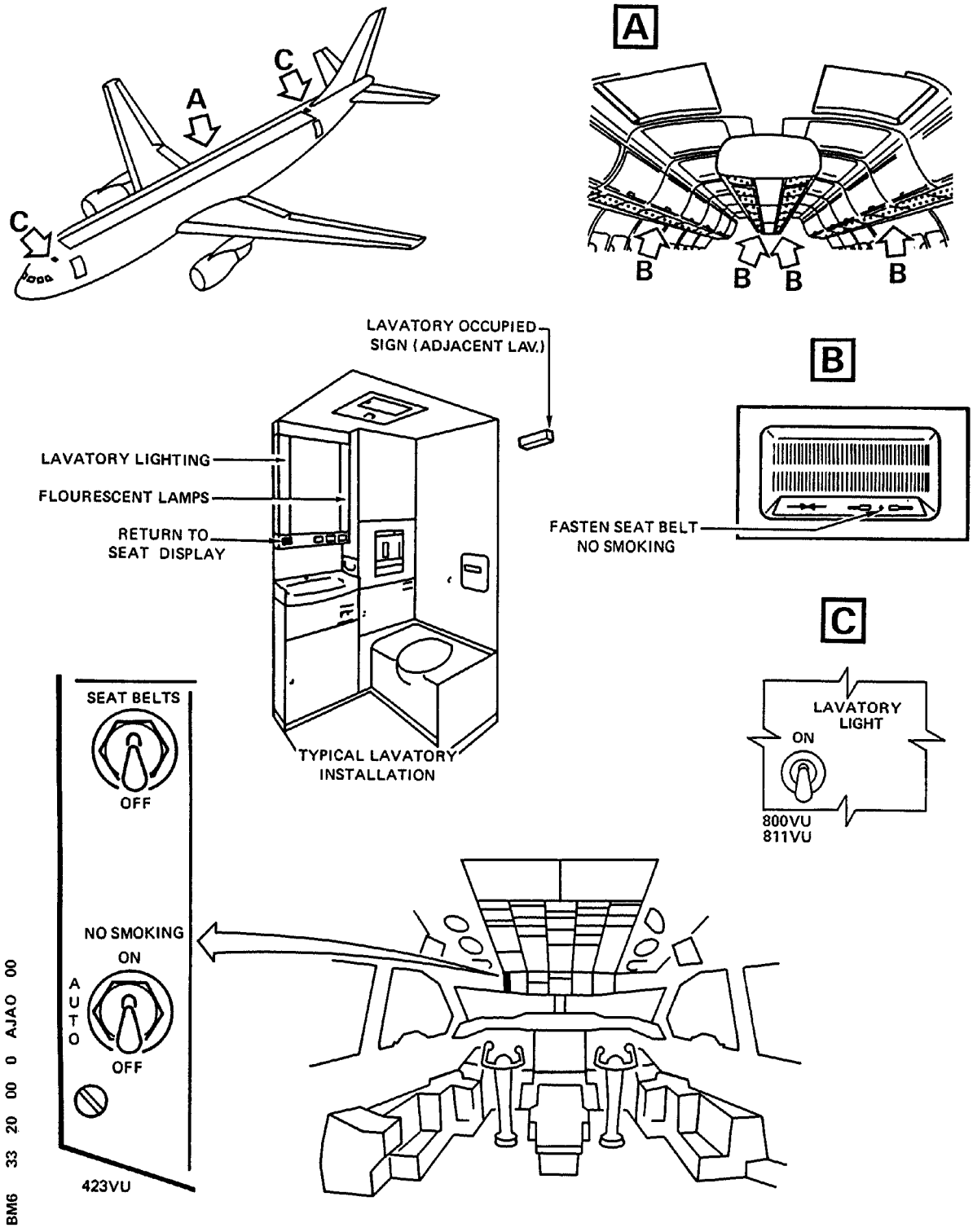
(1) No smoking signs - these signs are installed in the service channel above the seats and in the galley areas. The signs come on when the control switch, in the flight compartment, is placed to **ON**, or automatically when in the **'AUTO'** position and the landing gear is extended. A low-tone chime is broadcast via the **PA** system when the signs are switched **ON** or **OFF**. In the event of rapid decompression the signs come on irrespective of the control switch position.

(2) Fasten Seat Belt Signs - these signs are installed in the service channel above the seats and in the galley areas. They come on when the control switch, in the flight compartment, is placed to the **SEAT BELT** position. A low-tone chime is broadcast via the **PA** system when the signs are switched **ON** or **OFF**. In the event of rapid decompression the signs come on irrespective of the control switch position.

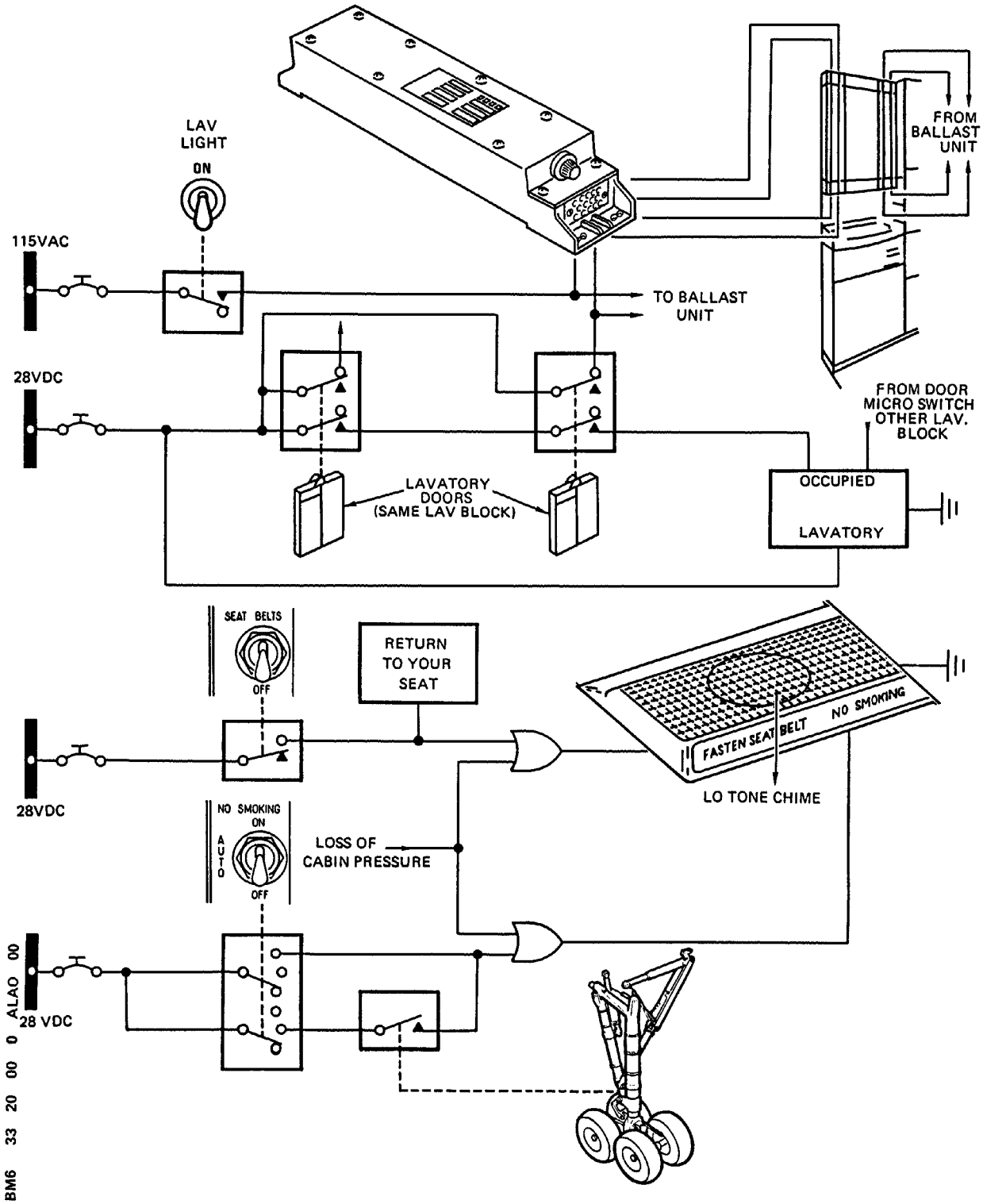
(3) Return to Seat Signs - these are installed in each lavatory and come on when the **FASTEN SEAT BELT** control switch is placed to the **SEAT BELT** position.

(4) Lavatory/Occupied Signs - one sign is installed adjacent to the lavatory area. The signs are inscribed with the words **LAVATORY** or **TOILET** together with the word **OCCUPIED**. The word **LAVATORY** or **TOILET** is illuminated when the associated circuit breakers are closed. Two words **OCCUPIED** are provided in each sign, one for the **LH** lavatories and one for the **RH** lavatories. The **FWD** lavatory sign **OCCUPIED** comes on when the **FWD** lavatory doors are closed and locked. The **AFT** lavatory sign **OCCUPIED** comes on when the **AFT** lavatory doors have been closed and locked.

(Ref. Fig. 007)
(Ref. Fig. 008)



Lighted Signs and Lavatory Lighting
Component Locations
Figure 007



Lighted Signs and Lavatory Lighting
Block Schematic
Figure 008

R **ON A/C 001-100,

D. Call System
The call system consists of individual passenger call P/BSW, each P/BSW contains a light which comes on when the P/BSW is pressed. Similar call P/BSW are installed in each of the lavatories.
Area lights, which come on when a call is initiated, are positioned so that the attendant can determine from which seat area or lavatory area the call was initiated. Each area light contains two blue lamps for passenger call and two amber lamps for lavatory call.
A yellow call light, mounted outside the lavatory door, comes on when a call from the lavatory is initiated.
A high-tone chime is broadcast via the PA system whenever a passenger call is initiated. A system test P/BSW is provided at the purser's station.

R **ON A/C 101-200,

R D. Call System
R The call system consists of individual lavatory call P/BSW, each P/BSW
R contains a light which comes on when the P/BSW is pressed.
R Area lights, which come on when a call is initiated, are positioned so that
R the attendant can determine from which seat area or lavatory area the call
R was initiated. Each area light contains two blue lamps for passenger call
R and two amber lamps for lavatory call.
R A yellow call light, mounted outside the lavatory door, comes on when a
R call from the lavatory is initiated.
R A high chime is broadcast via the PA system whenever a call is initiated.

R **ON A/C 001-100,

(Ref. Fig. 009)

R **ON A/C 101-200,

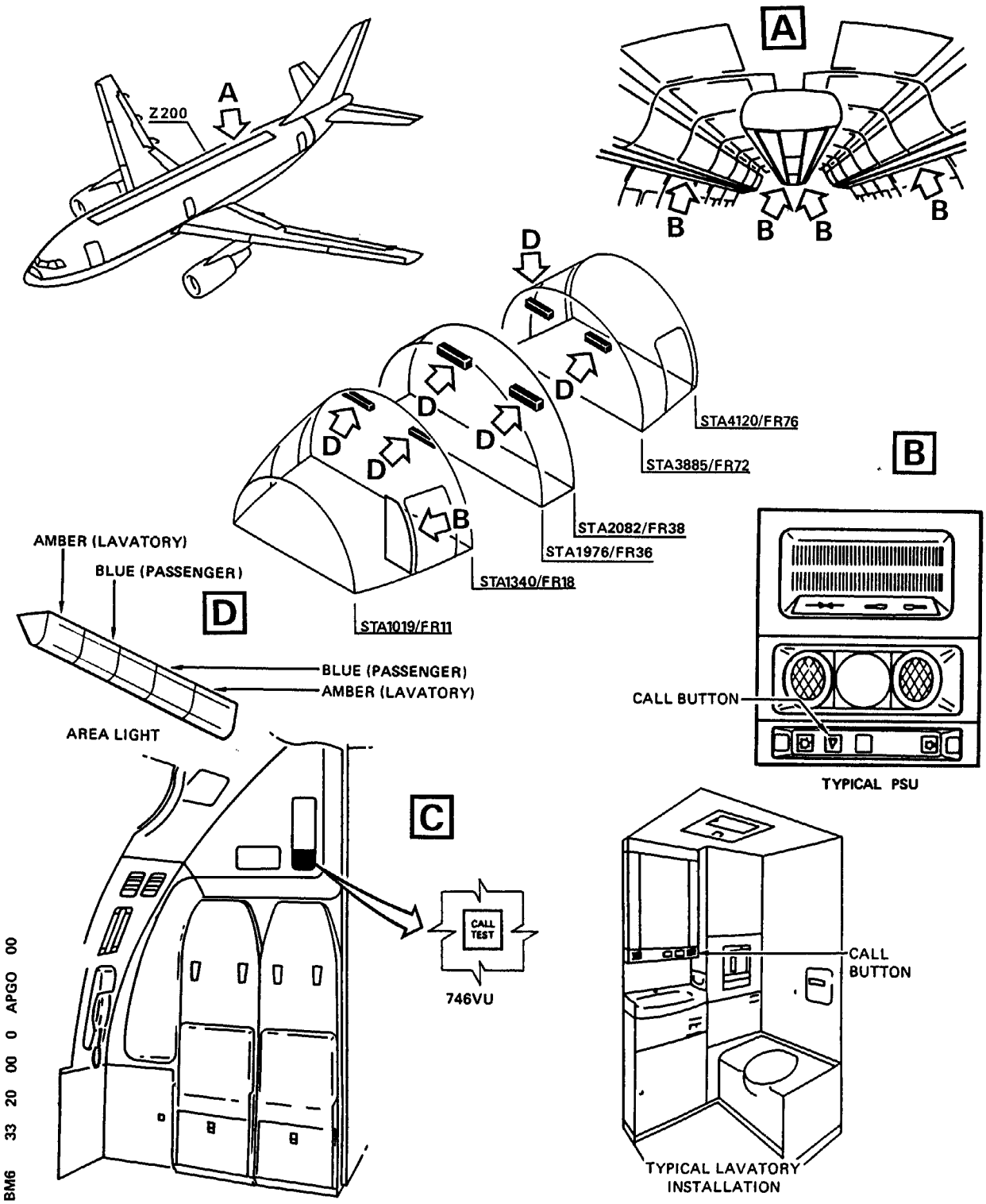
R (Ref. Fig. 010)

R **ON A/C ALL

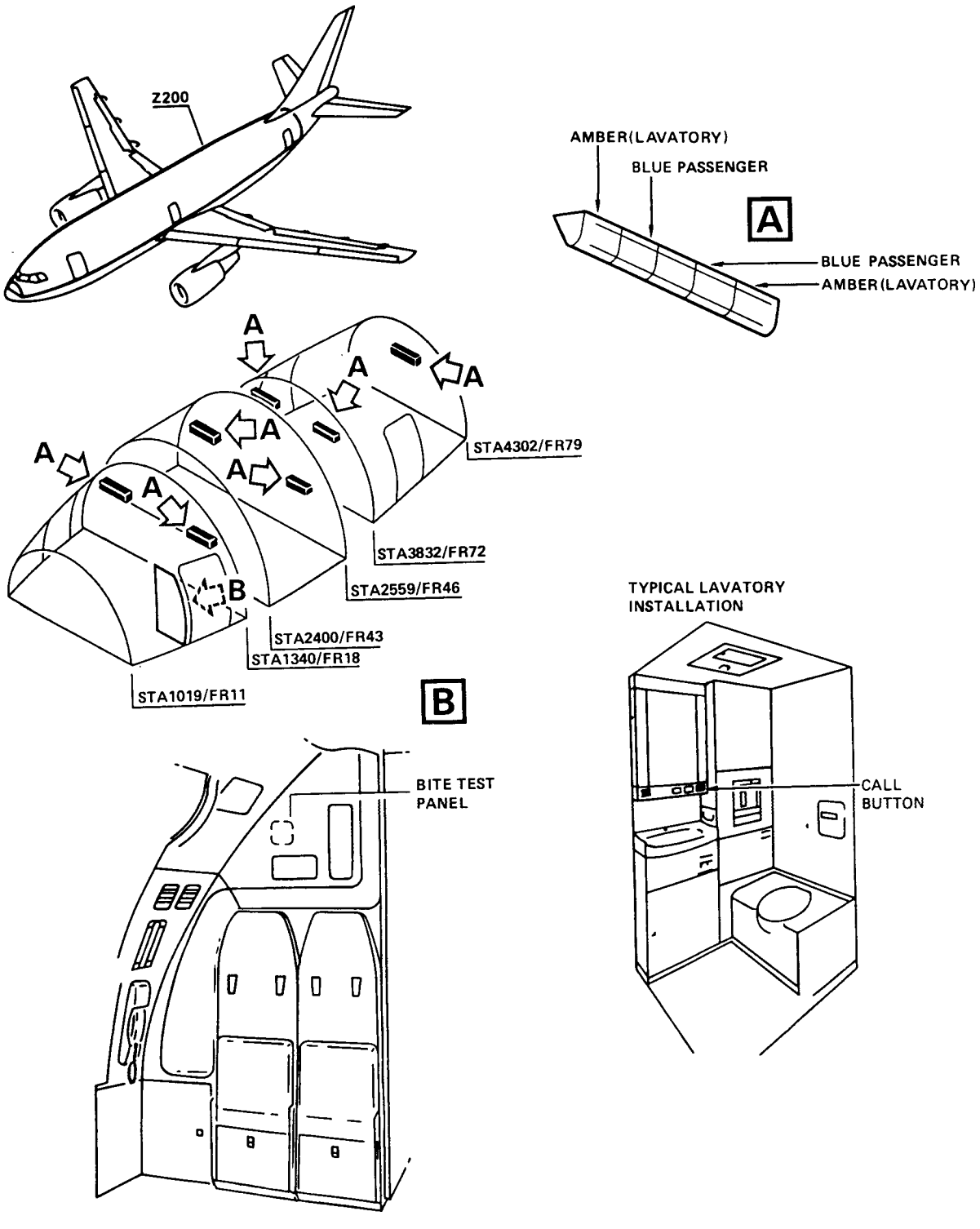
E. Attendant Work Lights
These lights are positioned to illuminate the attendant work areas. Each unit consists of a high-intensity light and control pushbutton switch.

R **ON A/C 001-100,

F. Reading Lights
The reading lights consists of individual passenger high-intensity lights, supplied with 115 V AC, each controlled by its own P/BSW. The power to the reading light system is controlled by a P/BSW installed at the purser's



Call System - Component Locations
Figure 009



BM6 33 20 00 0 APUO 00

Call System - Component Locations
Figure 010

R

station.
(Ref. Fig. 011)

R **ON A/C 101-200,

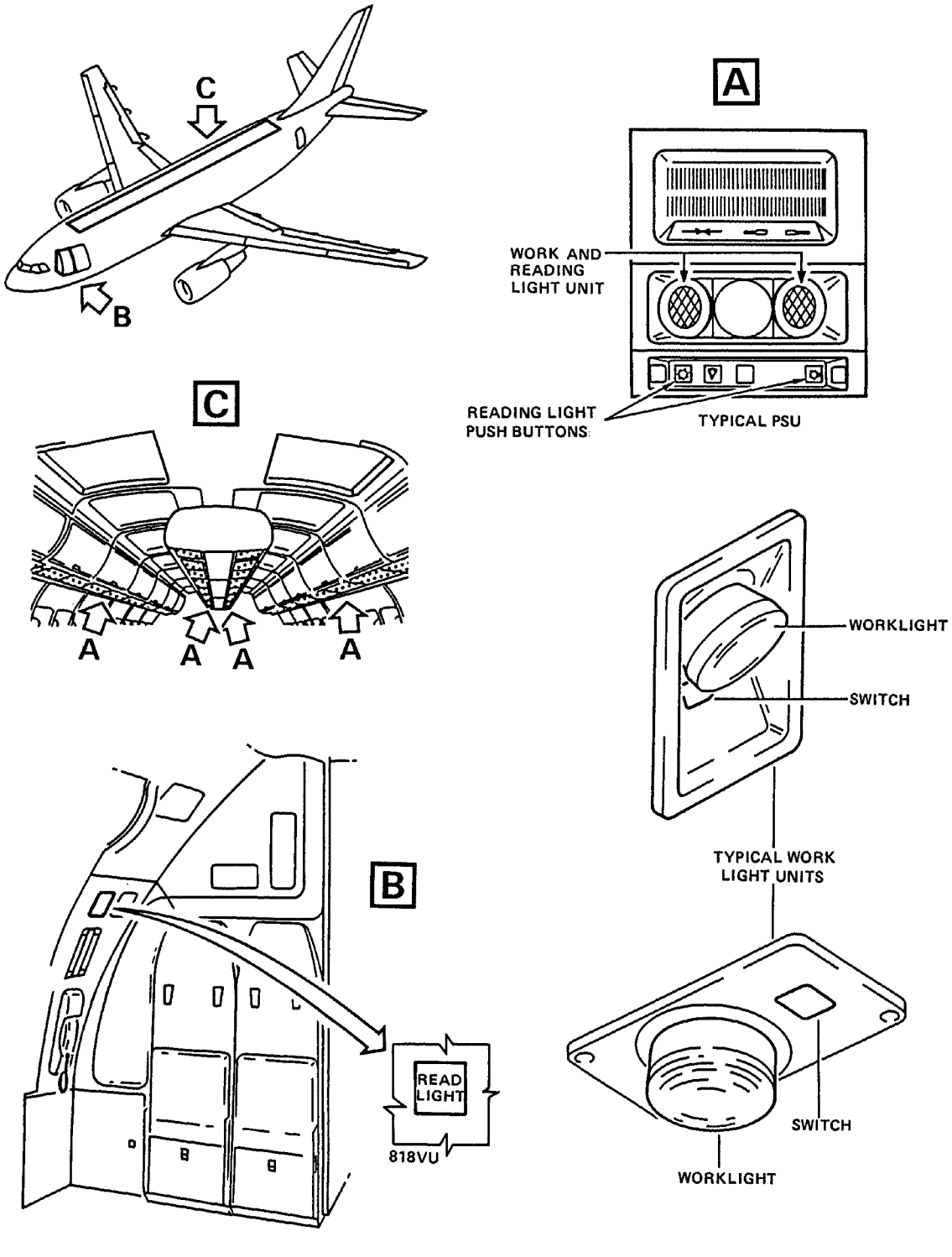
R (Ref. Fig. 012)

R **ON A/C 001-100,

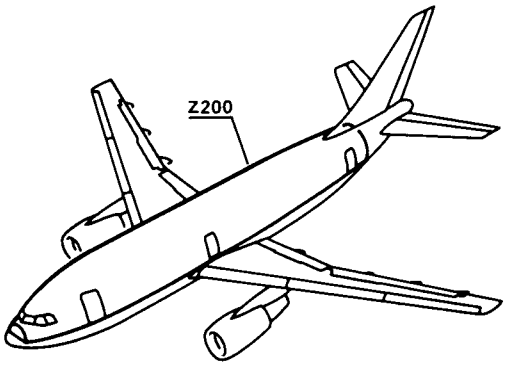
(Ref. Fig. 013)

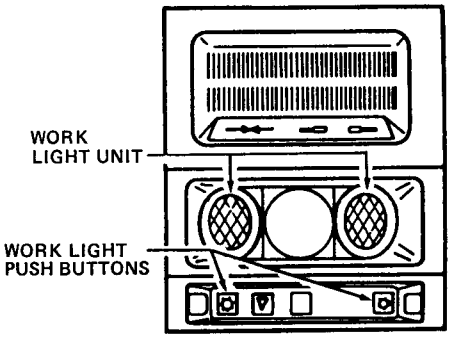
R **ON A/C 101-200,

R (Ref. Fig. 014)



Work and Reading Lights - Component Locations
Figure 011





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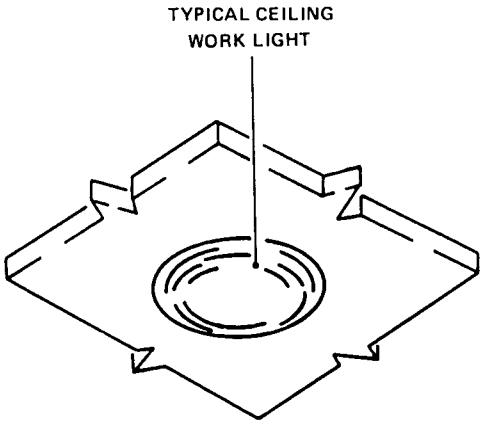
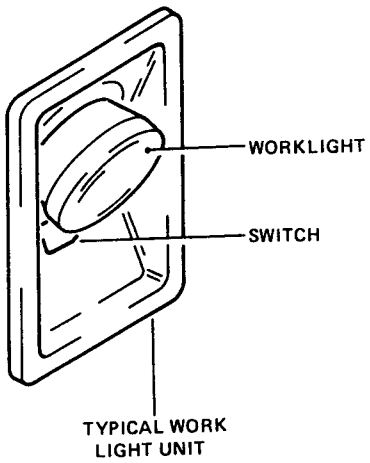
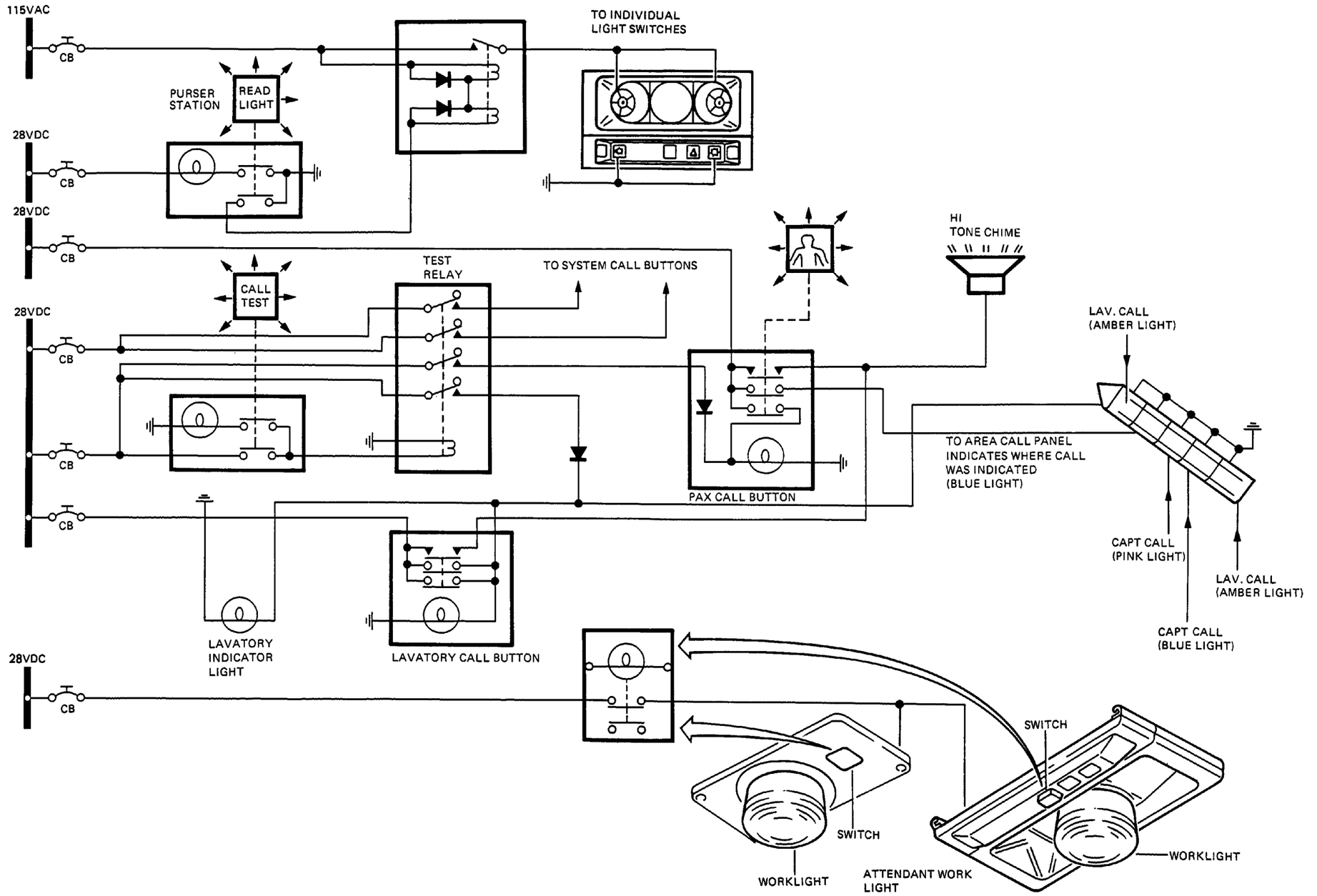




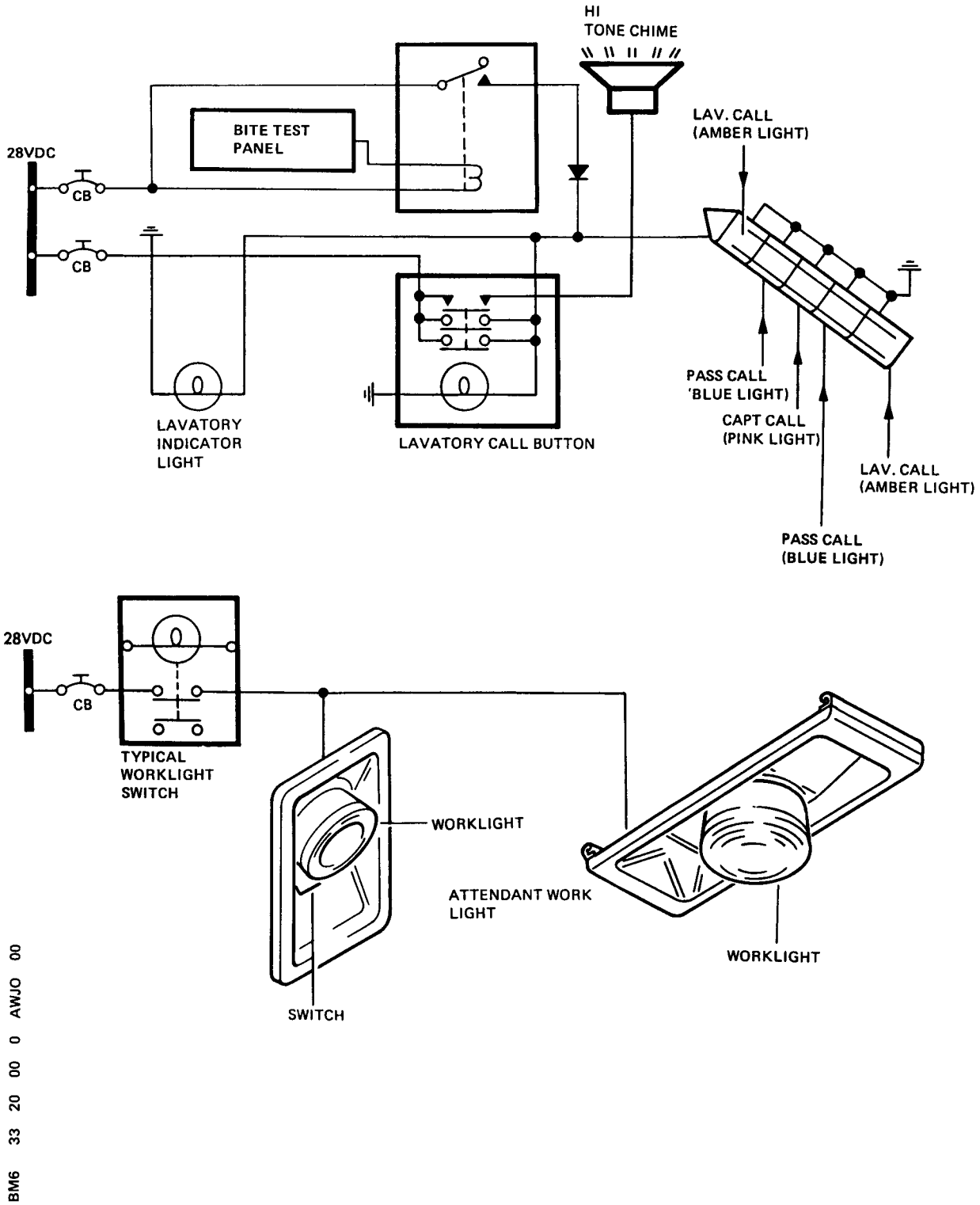
BM6 33 20 00 0 AUNO 00

R Work Lights - Component Locations
Figure 012



BM6 33 20 00 0 AWAO 00

Call System - Work and Reading Lights
Block Schematic
Figure 013



Call System and Work Lights - Block Schematic
Figure 014

R

1. General

The general illumination comprises passenger compartment and entrance area lighting. The general illumination is provided by fluorescent lamps, the intensity of which may be selected to any of three levels. The illumination system consists of:

R **ON A/C 101-104,

A. Passenger Compartment Lighting
- the FC passenger compartment illumination is provided by six strips of fluorescent lamps.
- the BC and YC passenger compartment illumination is provided by seven strips of fluorescent lamps.
- the passenger compartment lighting is divided into three zones, First Class(FC), Business Class(BC) and Economy Class(YC).
- the lighting intensity in FC, BC and YC is separately controlled and may be switched off, or to any of three light intensities 100, 50 or 10 percent.
- the illumination intensity, for each zone, is controlled from a light control panel at the purser's station.
  In addition, the BC passenger compartment illumination can also be controlled from the lighting control panel located adjacent to LH emergency exit door and the YC passenger compartment illumination can also be controlled from the lighting control panel located adjacent to LH AFT door.

**ON A/C 001-100,

A. Passenger Compartment Lighting
- the passenger compartment illumination is provided by seven strips of fluorescent lamps.
- the passenger compartment lighting is divided into three zones, First Class(FC), Economy Class Forward(YCF) and Economy Class Rear(YCR).
- the lighting intensity in FC, YCF and YCR is separately controlled and may be switched off, or to any of three light intensities 100, 50 or 10 percent.
- the illumination intensity, for each zone, is controlled from a light control panel at the purser's station.
  In addition, the YCF passenger compartment illumination can also be controlled from the lighting control panel located in galley 2 and the YCR passenger compartment illumination can also be controlled from the lighting control panel located adjacent to LH AFT door.

R **ON A/C 105-200,

R A. Passenger Compartment Lighting
R - the passenger compartment illumination is provided by seven strips of

R fluorescent lamps.
R - the passenger compartment lighting is divided into three zones, the
R Business Class (BC) in the FWD section and the Economy Class (YC) in
R the MID and the AFT section.
R - the lighting intensity in each zone is separately controlled and may be
R switched off, or to any of three light intensities 100, 50 or 10 percent.
R - the illumination intensity, for each zone, is controlled from a light
R control panel at the purser's station.
R In addition, the MID section of passenger compartment illumination can
R also be controlled from the lighting control panel located adjacent to
R LH emergency exit door and the AFT section of passenger compartment illu-
R mination can also be controlled from the lighting control panel located
R adjacent to LH AFT door.

R **ON A/C 001-100,

B. Entrance Area Lighting
- the entrance area lighting is provided by fluorescent lamps concealed in ceiling panels at each entrance and in galley pelmet.
- the entrance area lighting and intensity is controlled from a light control panel located at the purser's station.
- The fluorescent lamps in the ceiling panels at FWD entrance LH are automatically dimmed to 10% intensity whenever the engines are running and the flight compartment door is opened.

**ON A/C 101-200,

B. Entrance Area Lighting
- the entrance area lighting is provided by fluorescent lamps concealed in ceiling panels at entrance areas and in galley pelmet.
- the entrance area lighting is divided into three zones, FWD entrance, MID galley pelmet and AFT galley pelmet lighting.
- the lighting intensity is separately controlled and may be switched off, or to any of three light intensities 100, 50 or 10 percent.
- the illumination intensity for the FWD entrance area and THE AFT galley pelmet is controlled from a light control panel located at the purser's station.
  In addition, the AFT galley pelmet lighting can also be controlled from the lighting control panel located adjacent to LH AFT door.
- the illumination intensity for the MID galley pelmet is controlled from a light control panel located in galley 3.

**ON A/C ALL

2. Component Location

**ON A/C 001-100,

(Ref. Fig. 001)

**ON A/C 101-104,

(Ref. Fig. 002)

**ON A/C 105-200,

(Ref. Fig. 003)

**ON A/C 101-104,

(Ref. Fig. 004)

**ON A/C 001-100,

(Ref. Fig. 005)

**ON A/C 105-200,

(Ref. Fig. 006)

**ON A/C 001-100,

(Ref. Fig. 007)

**ON A/C 101-104,

(Ref. Fig. 008)

**ON A/C 105-200,

(Ref. Fig. 009)

**ON A/C 001-100,

(Ref. Fig. 010)

**ON A/C 101-200,

(Ref. Fig. 011)

**ON A/C 001-100,

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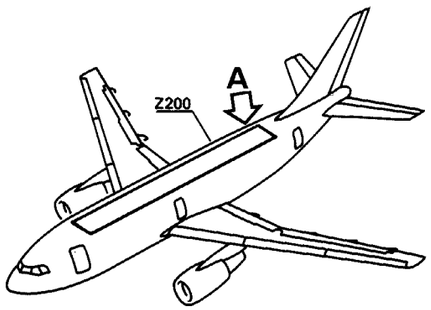
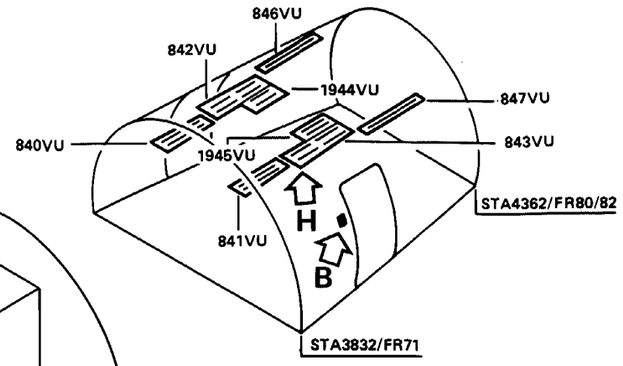
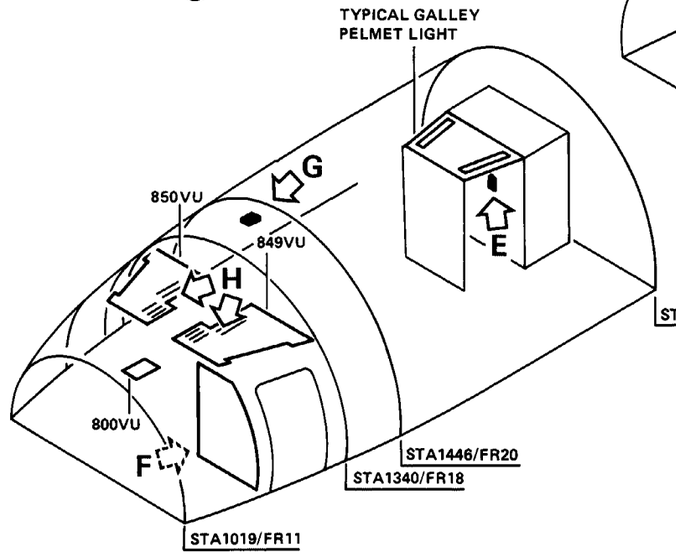
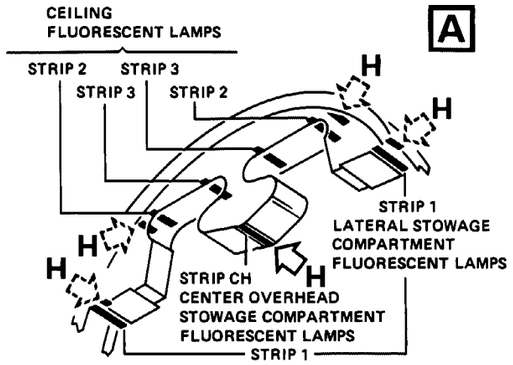
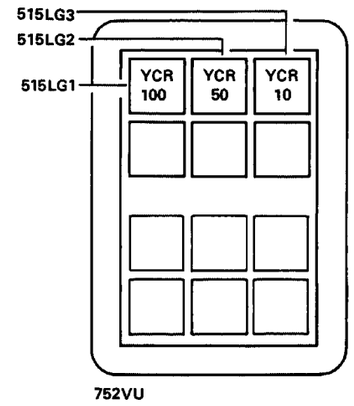
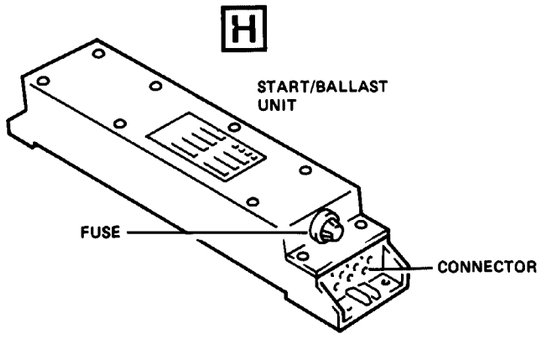


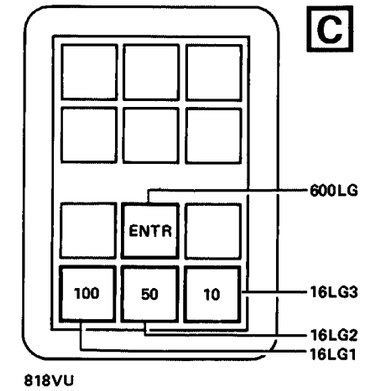


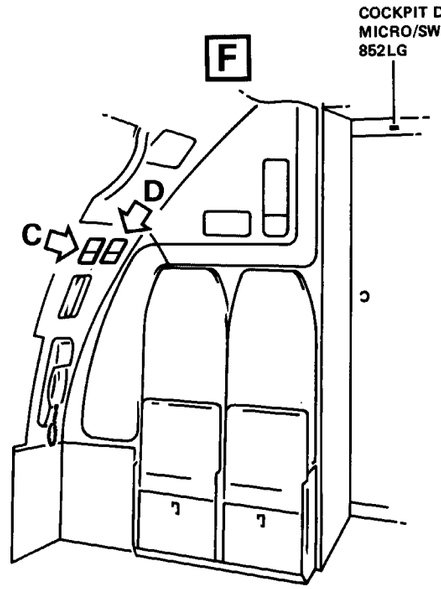


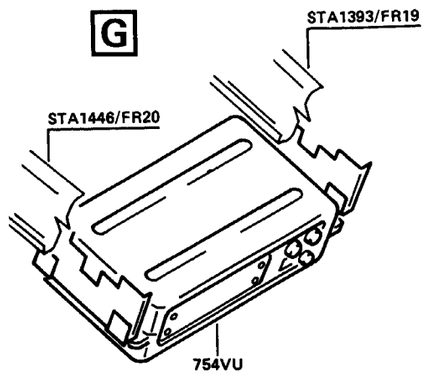


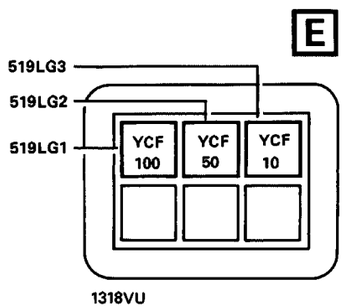


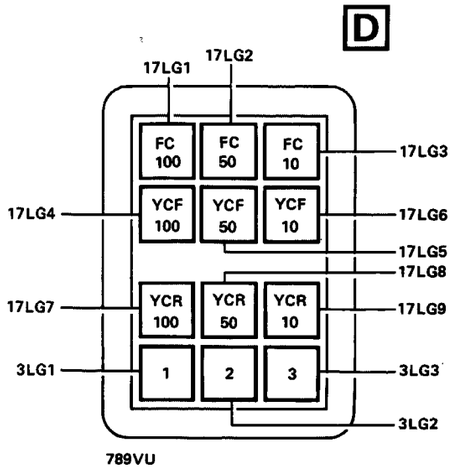






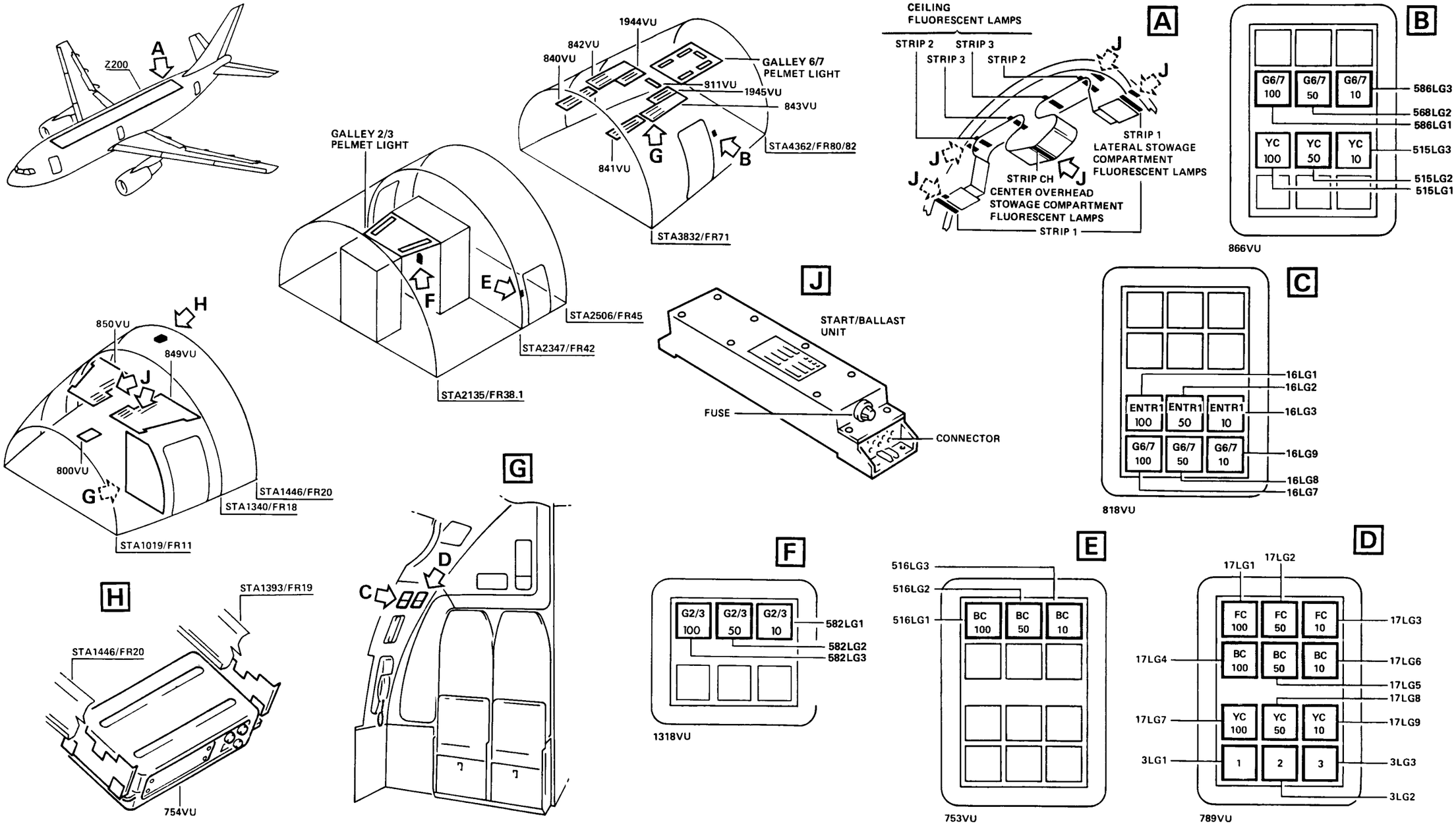






BM6 33 21 00 0 EAWO 00

Component Locations
Figure 001



BM6 33 21 00 0 EBDO 00

Component Locations
Figure 002

EFFECTIVITY: 101-104,

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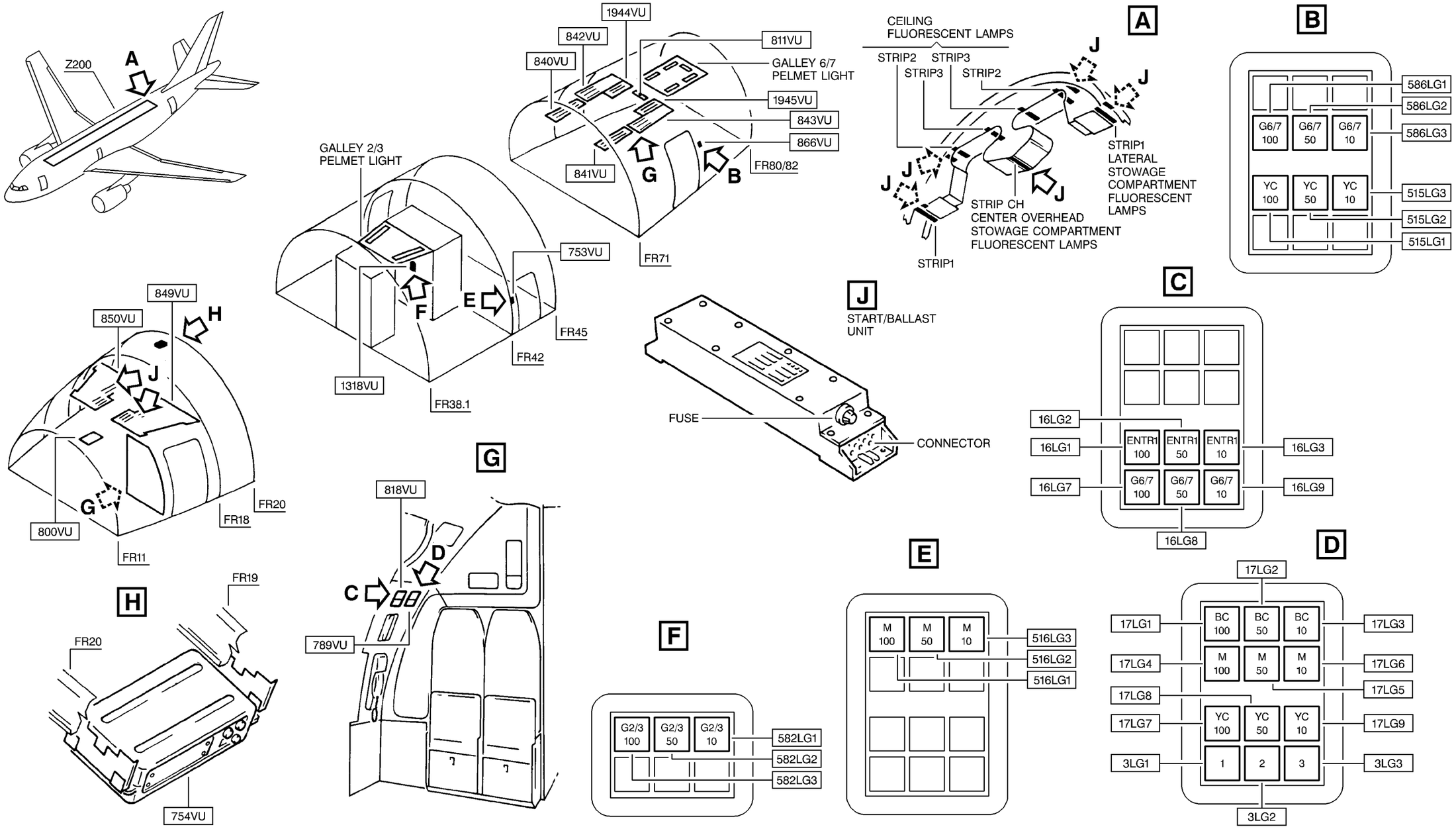
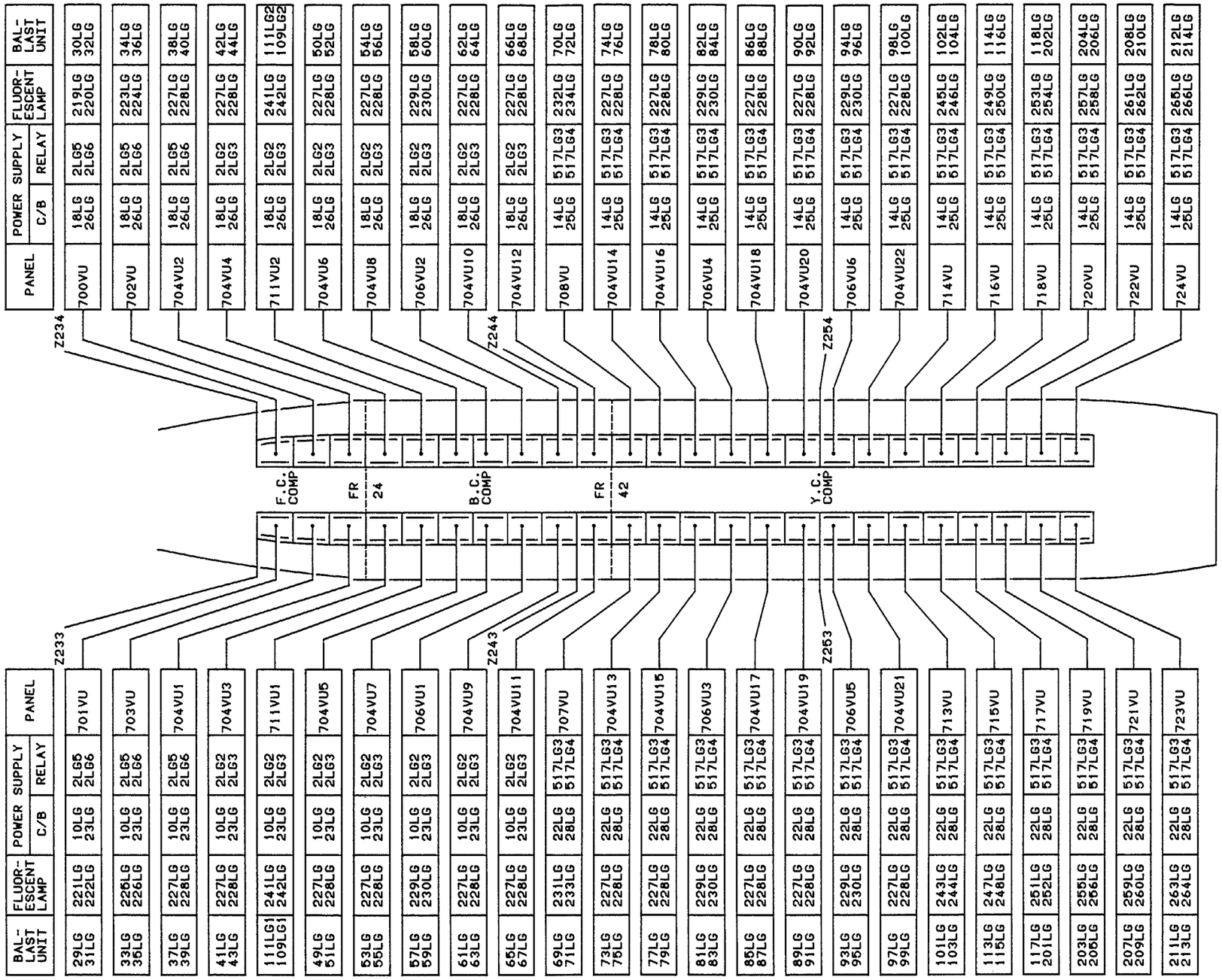
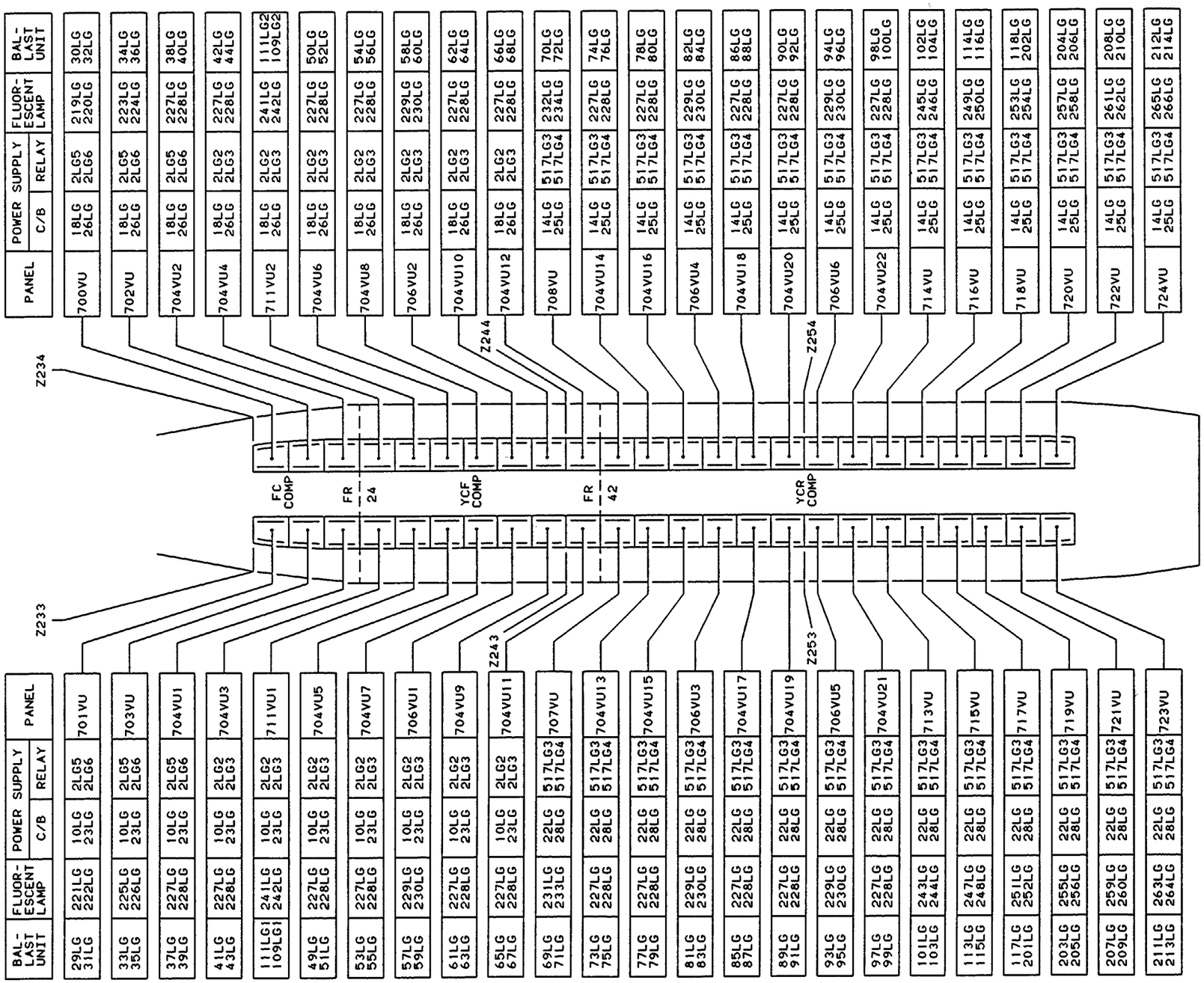


BM6 33 21 00 0 ECK0 00

Component Locations
Figure 003

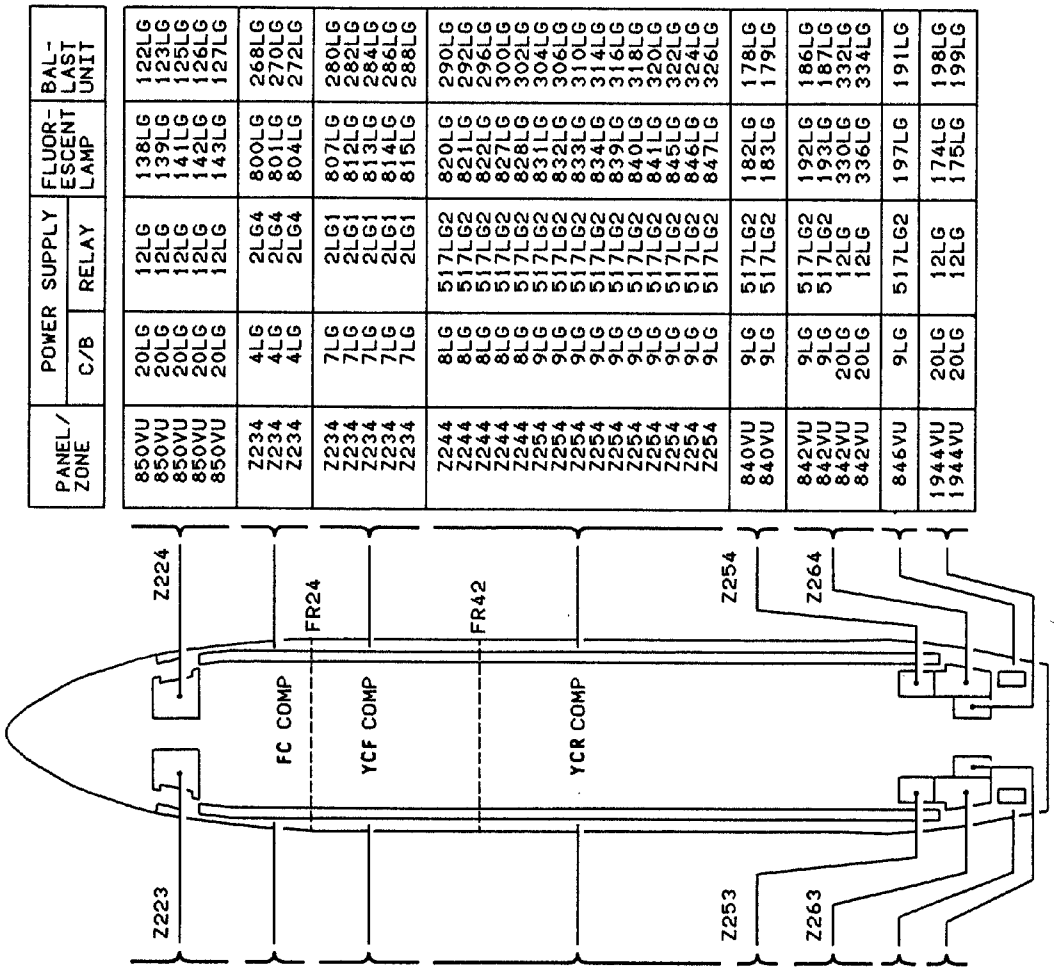


Start/Ballast Units and Fluorescent Lamps
(Light Strips 2 and 3) - Locations
Figure 004



Start/Ballast Units and Fluorescent Lamps
(Light Strips 2 and 3) - Locations
Figure 005

Start/Ballast Units and Fluorescent Lamps
(Light Strips 2 and 3) - Locations
Figure 006

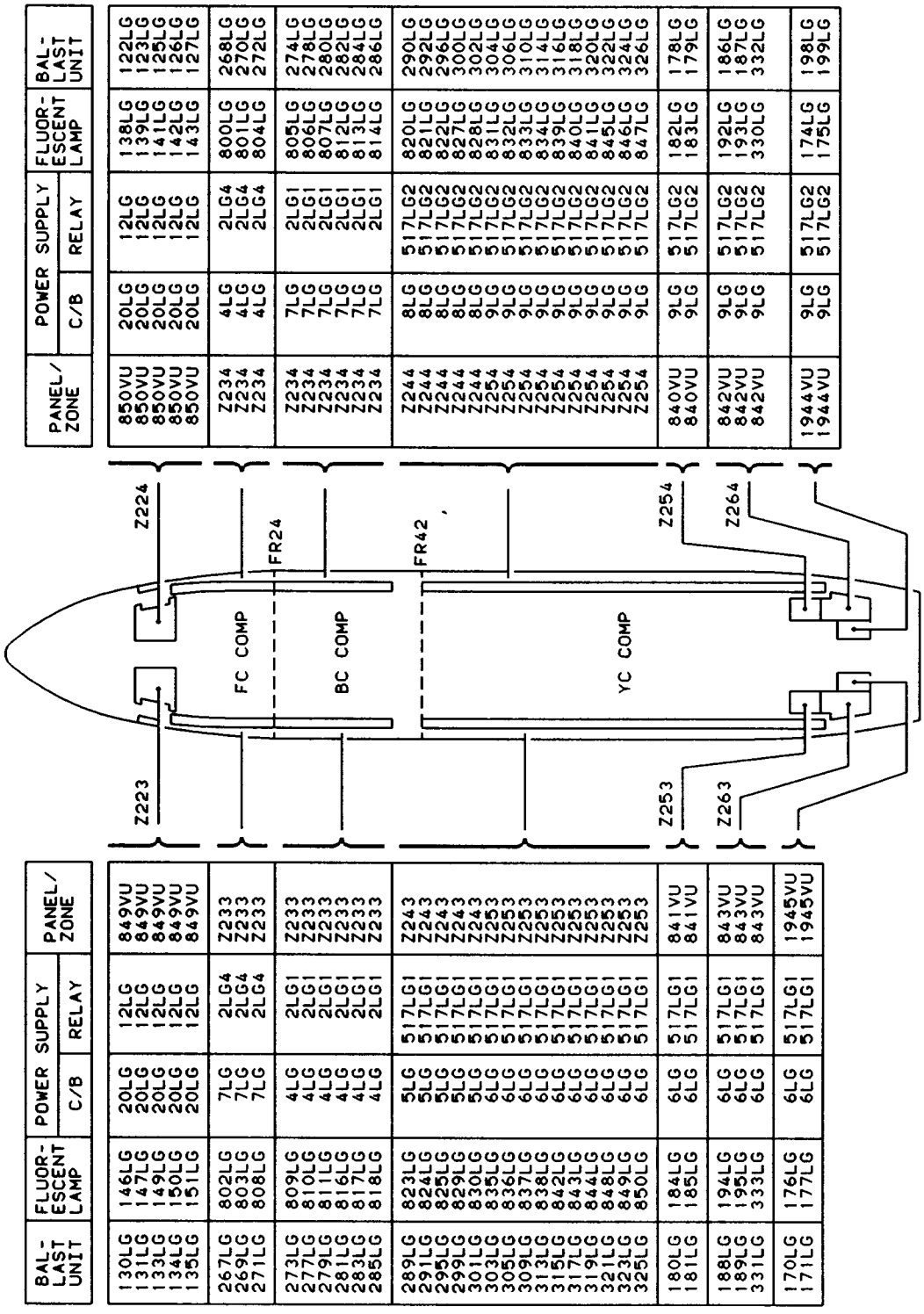


PANEL/ ZONE	POWER SUPPLY C/B	POWER SUPPLY RELAY	FLUOR-ESCENT LAMP	BAL-LAST UNIT
850VU	20LG	12LG	138LG	122LG
850VU	20LG	12LG	139LG	123LG
850VU	20LG	12LG	141LG	125LG
850VU	20LG	12LG	142LG	126LG
850VU	20LG	12LG	143LG	127LG
Z234	4LG	2LG4	800LG	268LG
Z234	4LG	2LG4	801LG	270LG
Z234	4LG	2LG4	804LG	272LG
Z234	7LG	2LG1	807LG	280LG
Z234	7LG	2LG1	812LG	282LG
Z234	7LG	2LG1	813LG	284LG
Z234	7LG	2LG1	814LG	286LG
Z234	7LG	2LG1	815LG	288LG
Z244	8LG	517LG2	820LG	290LG
Z244	8LG	517LG2	821LG	292LG
Z244	8LG	517LG2	822LG	296LG
Z244	8LG	517LG2	827LG	300LG
Z244	8LG	517LG2	828LG	302LG
Z254	9LG	517LG2	831LG	304LG
Z254	9LG	517LG2	832LG	306LG
Z254	9LG	517LG2	833LG	310LG
Z254	9LG	517LG2	834LG	314LG
Z254	9LG	517LG2	839LG	316LG
Z254	9LG	517LG2	840LG	318LG
Z254	9LG	517LG2	841LG	320LG
Z254	9LG	517LG2	845LG	322LG
Z254	9LG	517LG2	846LG	324LG
Z254	9LG	517LG2	847LG	326LG
840VU	9LG	517LG2	182LG	178LG
840VU	9LG	517LG2	183LG	179LG
842VU	9LG	517LG2	192LG	186LG
842VU	9LG	517LG2	193LG	187LG
842VU	20LG	12LG	330LG	332LG
842VU	20LG	12LG	336LG	334LG
846VU	9LG	517LG2	197LG	191LG
1944VU	20LG	12LG	174LG	198LG
1944VU	20LG	12LG	175LG	199LG

BAL-LAST UNIT	FLUOR-ESCENT LAMP	POWER SUPPLY C/B	POWER SUPPLY RELAY	PANEL/ ZONE
130LG	146LG	20LG	12LG	849VU
131LG	147LG	20LG	12LG	849VU
133LG	149LG	20LG	12LG	849VU
134LG	150LG	20LG	12LG	849VU
135LG	151LG	20LG	12LG	849VU
267LG	802LG	7LG	2LG4	Z233
269LG	803LG	7LG	2LG4	Z233
271LG	806LG	7LG	2LG4	Z233
279LG	811LG	4LG	2LG1	Z233
281LG	816LG	4LG	2LG1	Z233
283LG	817LG	4LG	2LG1	Z233
285LG	818LG	4LG	2LG1	Z233
287LG	819LG	4LG	2LG1	Z233
289LG	823LG	5LG	517LG1	Z243
291LG	824LG	5LG	517LG1	Z243
295LG	825LG	5LG	517LG1	Z243
299LG	829LG	5LG	517LG1	Z243
301LG	830LG	5LG	517LG1	Z243
303LG	835LG	6LG	517LG1	Z253
305LG	836LG	6LG	517LG1	Z253
309LG	837LG	6LG	517LG1	Z253
313LG	838LG	6LG	517LG1	Z253
315LG	842LG	6LG	517LG1	Z253
317LG	843LG	6LG	517LG1	Z253
319LG	844LG	6LG	517LG1	Z253
321LG	848LG	6LG	517LG1	Z253
323LG	849LG	6LG	517LG1	Z253
325LG	850LG	6LG	517LG1	Z253
180LG	184LG	6LG	517LG1	841VU
181LG	185LG	6LG	517LG1	841VU
188LG	194LG	6LG	517LG1	843VU
189LG	195LG	6LG	517LG1	843VU
331LG	333LG	20LG	12LG	843VU
335LG	337LG	20LG	12LG	843VU
190LG	196LG	6LG	517LG1	847VU
170LG	176LG	20LG	12LG	1945VU
171LG	177LG	20LG	12LG	1945VU

B M 6 33 21 00 0 EFK0 00

Start/Ballast Units and Fluorescent Lamps
(Light Strips 1 and Entrance Area Lighting) - Locations
Figure 007



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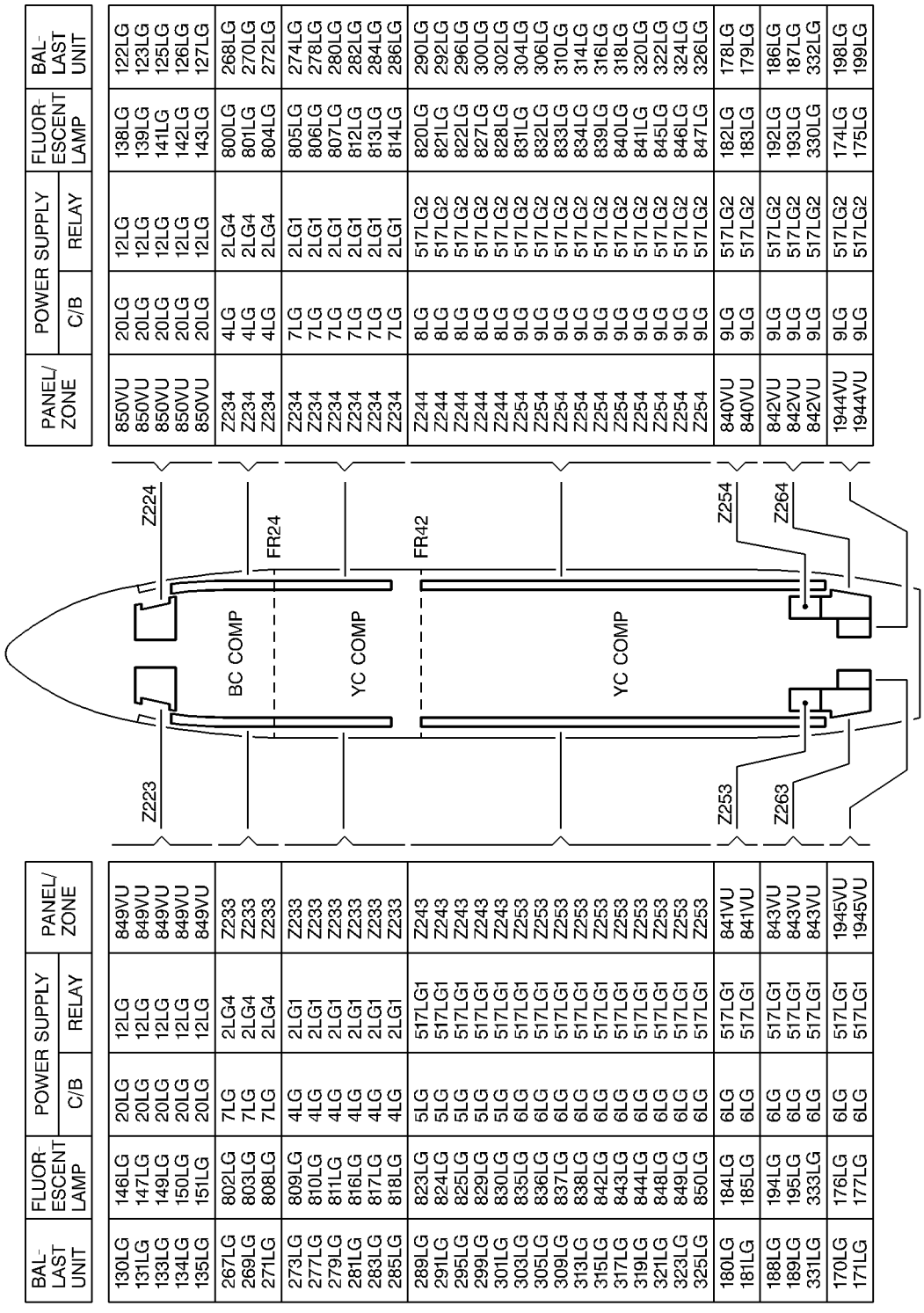
Start/Ballast Units and Fluorescent Lamps
(Light Strips 1 and Entrance Area Lighting) - Locations
Figure 008



PANEL/ ZONE	POWER SUPPLY C/B	POWER SUPPLY RELAY	FLUOR-ESCENT LAMP	BAL-LAST UNIT
850VU	20LG	12LG	138LG	122LG
850VU	20LG	12LG	139LG	123LG
850VU	20LG	12LG	141LG	125LG
850VU	20LG	12LG	142LG	126LG
850VU	20LG	12LG	143LG	127LG
Z234	4LG	2LG4	800LG	268LG
Z234	4LG	2LG4	801LG	270LG
Z234	4LG	2LG4	804LG	272LG
Z234	7LG	2LG1	805LG	274LG
Z234	7LG	2LG1	806LG	278LG
Z234	7LG	2LG1	807LG	280LG
Z234	7LG	2LG1	812LG	282LG
Z234	7LG	2LG1	813LG	284LG
Z234	7LG	2LG1	814LG	286LG
Z244	8LG	517LG2	820LG	290LG
Z244	8LG	517LG2	821LG	292LG
Z244	8LG	517LG2	822LG	296LG
Z244	8LG	517LG2	827LG	300LG
Z244	8LG	517LG2	828LG	302LG
Z254	9LG	517LG2	831LG	304LG
Z254	9LG	517LG2	832LG	306LG
Z254	9LG	517LG2	833LG	310LG
Z254	9LG	517LG2	834LG	314LG
Z254	9LG	517LG2	839LG	316LG
Z254	9LG	517LG2	840LG	318LG
Z254	9LG	517LG2	841LG	320LG
Z254	9LG	517LG2	845LG	322LG
Z254	9LG	517LG2	846LG	324LG
Z254	9LG	517LG2	847LG	326LG
840VU	9LG	517LG2	182LG	178LG
840VU	9LG	517LG2	183LG	179LG
842VU	9LG	517LG2	192LG	186LG
842VU	9LG	517LG2	193LG	187LG
842VU	9LG	517LG2	330LG	332LG
1944VU	9LG	517LG2	174LG	198LG
1944VU	9LG	517LG2	175LG	199LG

BAL-LAST UNIT	FLUOR-ESCENT LAMP	POWER SUPPLY C/B	POWER SUPPLY RELAY	PANEL/ ZONE
130LG	146LG	20LG	12LG	849VU
131LG	147LG	20LG	12LG	849VU
133LG	149LG	20LG	12LG	849VU
134LG	150LG	20LG	12LG	849VU
135LG	151LG	20LG	12LG	849VU
267LG	802LG	7LG	2LG4	Z233
269LG	803LG	7LG	2LG4	Z233
271LG	808LG	7LG	2LG4	Z233
273LG	809LG	4LG	2LG1	Z233
277LG	810LG	4LG	2LG1	Z233
279LG	811LG	4LG	2LG1	Z233
281LG	816LG	4LG	2LG1	Z233
283LG	817LG	4LG	2LG1	Z233
285LG	818LG	4LG	2LG1	Z233
289LG	823LG	5LG	517LG1	Z243
291LG	824LG	5LG	517LG1	Z243
295LG	825LG	5LG	517LG1	Z243
299LG	829LG	5LG	517LG1	Z243
301LG	830LG	5LG	517LG1	Z243
303LG	835LG	6LG	517LG1	Z253
305LG	836LG	6LG	517LG1	Z253
309LG	837LG	6LG	517LG1	Z253
313LG	838LG	6LG	517LG1	Z253
315LG	842LG	6LG	517LG1	Z253
317LG	843LG	6LG	517LG1	Z253
319LG	844LG	6LG	517LG1	Z253
321LG	848LG	6LG	517LG1	Z253
323LG	849LG	6LG	517LG1	Z253
325LG	850LG	6LG	517LG1	Z253
180LG	184LG	6LG	517LG1	841VU
181LG	185LG	6LG	517LG1	841VU
188LG	194LG	6LG	517LG1	843VU
189LG	195LG	6LG	517LG1	843VU
331LG	333LG	6LG	517LG1	843VU
170LG	176LG	6LG	517LG1	1945VU
171LG	177LG	6LG	517LG1	1945VU

BM6 33 21 00 0 EKB0 00

Start/Ballast Units and Fluorescent Lamps
(Light Strips 1 and Entrance Area Lighting) - Locations
Figure 009

R EFFECTIVITY: 105-200,

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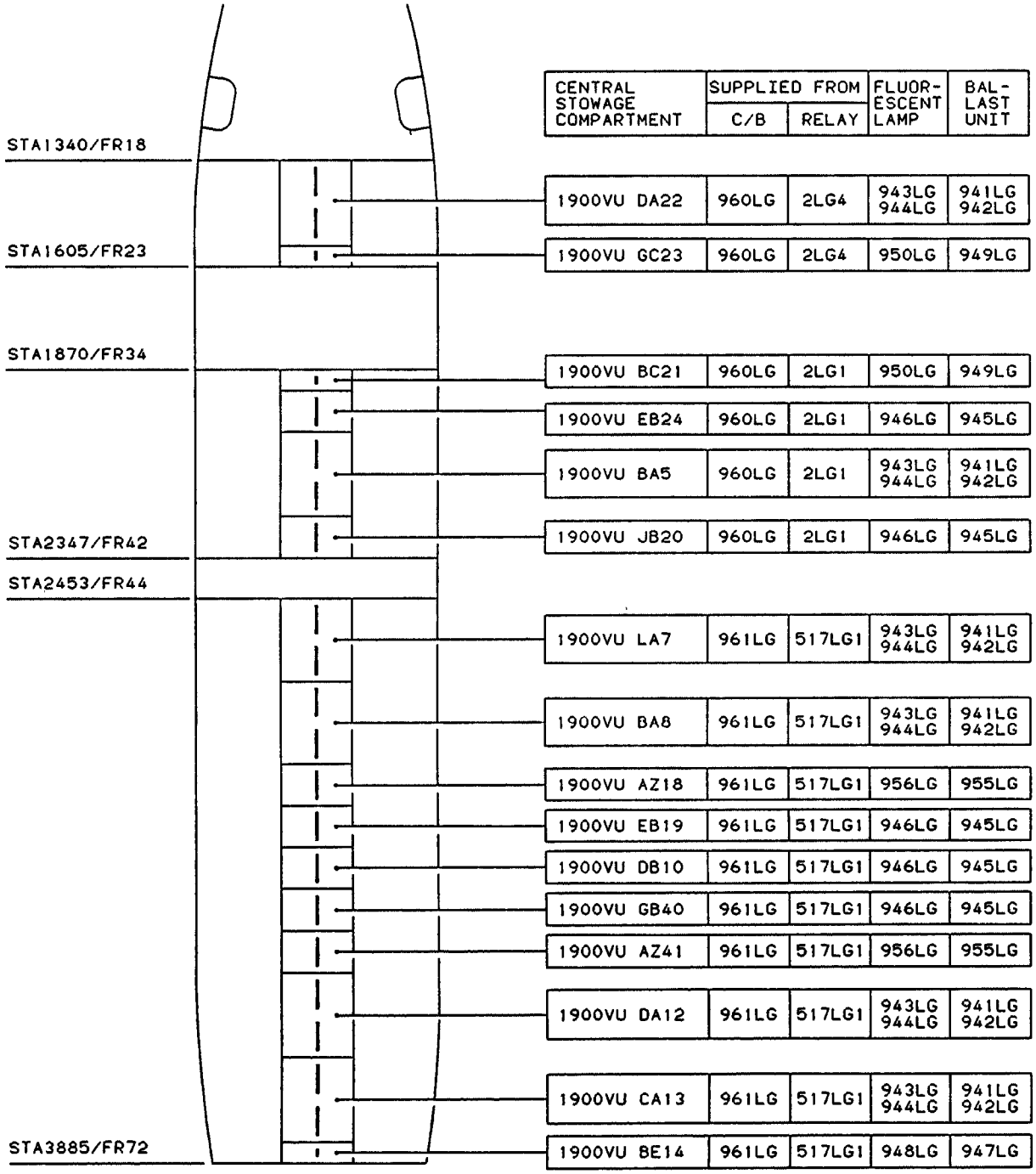
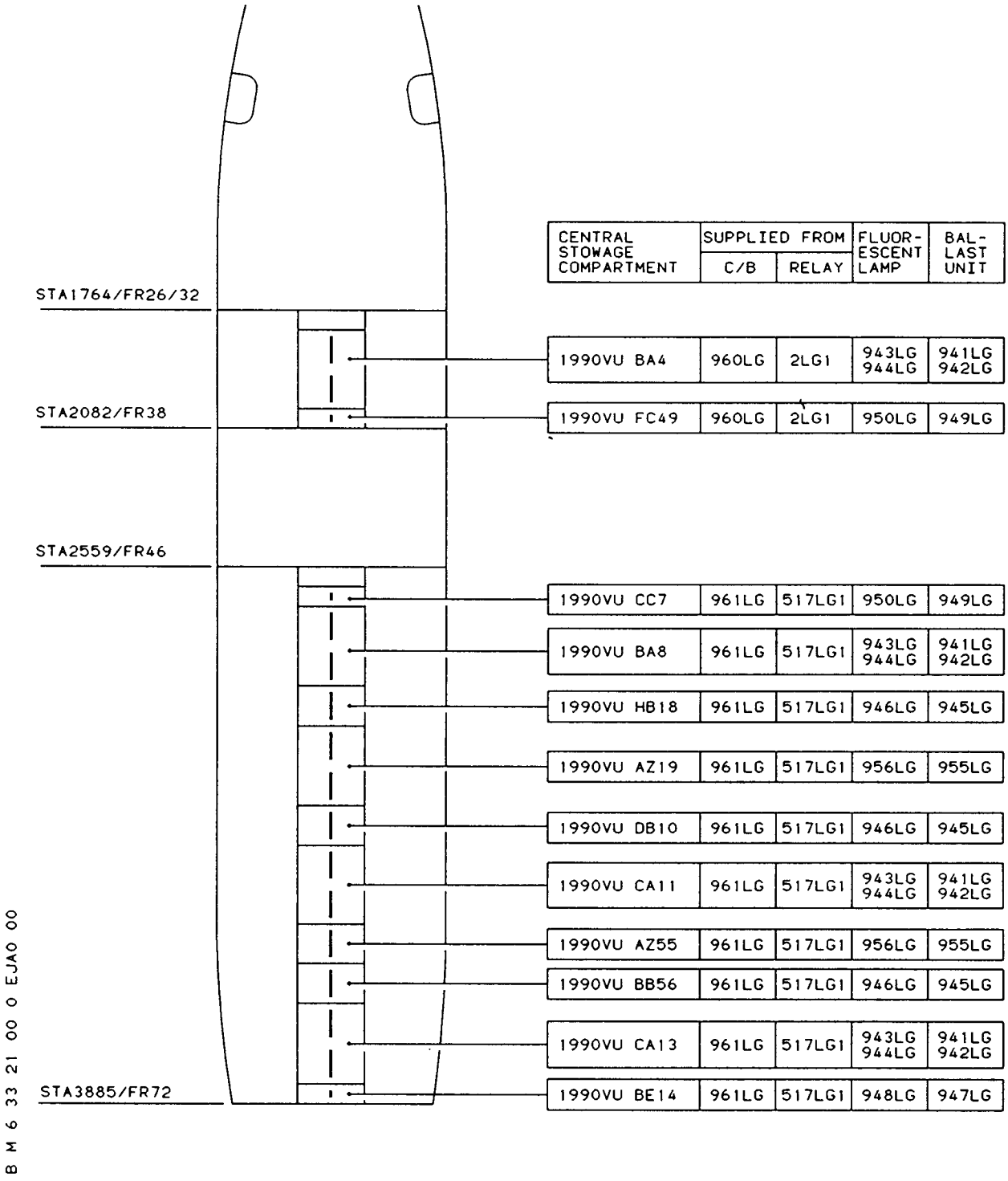


CENTRAL STOWAGE COMPARTMENT	SUPPLIED FROM C/B	SUPPLIED FROM RELAY	FLUOR-ESCENT LAMP	BAL-LAST UNIT
1900VU DA22	960LG	2LG4	943LG 944LG	941LG 942LG
1900VU GC23	960LG	2LG4	950LG	949LG
1900VU BC21	960LG	2LG1	950LG	949LG
1900VU EB24	960LG	2LG1	946LG	945LG
1900VU BA5	960LG	2LG1	943LG 944LG	941LG 942LG
1900VU JB20	960LG	2LG1	946LG	945LG
1900VU LA7	961LG	517LG1	943LG 944LG	941LG 942LG
1900VU BA8	961LG	517LG1	943LG 944LG	941LG 942LG
1900VU AZ18	961LG	517LG1	956LG	955LG
1900VU EB19	961LG	517LG1	946LG	945LG
1900VU DB10	961LG	517LG1	946LG	945LG
1900VU GB40	961LG	517LG1	946LG	945LG
1900VU AZ41	961LG	517LG1	956LG	955LG
1900VU DA12	961LG	517LG1	943LG 944LG	941LG 942LG
1900VU CA13	961LG	517LG1	943LG 944LG	941LG 942LG
1900VU BE14	961LG	517LG1	948LG	947LG

B M 6 33 21 00 0 EHP0 00

Start/Ballast Units and Fluorescent Lamps
(Light Strip Center Hatrack) - Locations
Figure 010



CENTRAL STOWAGE COMPARTMENT	SUPPLIED FROM C/B	SUPPLIED FROM RELAY	FLUOR-ESCENT LAMP	BAL-LAST UNIT
1990VU BA4	960LG	2LG1	943LG 944LG	941LG 942LG
1990VU FC49	960LG	2LG1	950LG	949LG
1990VU CC7	961LG	517LG1	950LG	949LG
1990VU BA8	961LG	517LG1	943LG 944LG	941LG 942LG
1990VU HB18	961LG	517LG1	946LG	945LG
1990VU AZ19	961LG	517LG1	956LG	955LG
1990VU DB10	961LG	517LG1	946LG	945LG
1990VU CA11	961LG	517LG1	943LG 944LG	941LG 942LG
1990VU AZ55	961LG	517LG1	956LG	955LG
1990VU BB56	961LG	517LG1	946LG	945LG
1990VU CA13	961LG	517LG1	943LG 944LG	941LG 942LG
1990VU BE14	961LG	517LG1	948LG	947LG

Start/Ballast Units and Fluorescent Lamps
(Light Strip Center Hatrack) - Locations
Figure 011

R EFFECTIVITY: 101-200,

PIA

Printed in France

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF.
1LG1	RELAY-YCF CABIN DIMMING 50%	800VU	223		
1LG2	RELAY-YCF CABIN DIMMING 10%	800VU	223		
2LG1	RELAY-AC POWER CONTROL LIGHT 1+CH YCF	800VU	223		
2LG2	RELAY-AC POWER CONTROL LIGHT 2 YCF	800VU	223		
2LG3	RELAY-AC POWER CONTROL LIGHT 3 YCF	800VU	223		
2LG4	RELAY-AC POWER CONTROL LIGHT 1 FC	800VU	223		
2LG5	RELAY-AC POWER CONTROL LIGHT 2 FC	800VU	223		
2LG6	RELAY-AC POWER CONTROL LIGHT 3 FC	800VU	223		
3LG1	P/BSW-1	789VU	221		
3LG2	P/BSW-2	789VU	221		
3LG3	P/BSW-3	789VU	221		
12LG	RELAY-AC POWER CONTROL ENTRANCE	800VU	223		
13LG	RELAY-ENTRANCE DIMMING 50%	800VU	223		
16LG1	P/BSW-100	818VU	221		
16LG2	P/BSW-50	818VU	221		
16LG3	P/BSW-10	818VU	221		
17LG	RELAY-ENTRANCE DIMMING 10%	800VU	223		
17LG1	P/BSW-FC 100	789VU	221		
17LG2	P/BSW-FC 50	789VU	221		
17LG3	P/BSW-FC 10	789VU	221		
17LG4	P/BSW-YCF 100	789VU	221		
17LG5	P/BSW-YCF 50	789VU	221		
17LG6	P/BSW-YCF 10	789VU	221		
17LG7	P/BSW-YCR 100	789VU	221		
17LG8	P/BSW-YCR 50	789VU	221		
17LG9	P/BSW-YCR 10	789VU	221		
479LG	RELAY-COCKPIT DOOR DIMMING	849VU	223		
505LG	RELAY-FC CABIN DIMMING 50%	800VU	223		
506LG	RELAY-FC CABIN DIMMING 10%	800VU	223		
515LG1	P/BSW-YCR 100	752VU	261		
515LG2	P/BSW-YCR 50	752VU	261		
515LG3	P/BSW-YCR 10	752VU	261		
517LG1	RELAY-AC POWER CONTROL LIGHT 1+CH YCR	754VU	234		
517LG2	RELAY-AC POWER CONTROL LIGHT 1 YCR	754VU	234		
517LG3	RELAY-AC POWER CONTROL LIGHT 2 YCR	754VU	234		
517LG4	RELAY-AC POWER CONTROL LIGHT 3 YCR	754VU	234		
519LG1	P/BSW-YCF 100	1318VU	230		
519LG2	P/BSW-YCF 50	1318VU	230		
519LG3	P/BSW-YCF 10	1318VU	230		
521LG	RELAY-YCR CABIN DIMMING 50%	754VU	234		
522LG	RELAY-YCR CABIN DIMMING 10%	754VU	234		
600LG	P/BSW-ENTR	818VU	221		
720LG	DUAL IN LINE RELAY	1360VU	234		
721LG	DUAL IN LINE RELAY	1360VU	234		
722LG	DUAL IN LINE RELAY	1360VU	234		
723LG	INTEGRATED CIRCUIT	1360VU	234		
724LG	INTEGRATED CIRCUIT	1360VU	234		
725LG	INTEGRATED CIRCUIT	1360VU	234		

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF.
726LG	DIODE	1360VU	234		
727LG	DIODE	1360VU	234		
728LG	DIODE	1360VU	234		
729LG	DIODE	1360VU	234		
730LG	DIODE	1360VU	234		
731LG	DIODE	1360VU	234		
732LG	DIODE	1360VU	234		
733LG	DIODE	1360VU	234		
734LG	DIODE	1360VU	234		
735LG	DUAL IN LINE RELAY	1360VU	234		
736LG	DUAL IN LINE RELAY	1360VU	234		
737LG	DUAL IN LINE RELAY	1360VU	234		
757LG	RELAY YCR	754VU	234		
758LG	RELAY FC	754VU	234		
759LG	RELAY YCF	754VU	234		
852LG	MICROSWITCH-FLIGHT COMPARTMENT DOOR		223		
900LG	DIODE	1360VU	234		
901LG	DIODE	1360VU	234		
902LG	DIODE	1360VU	234		
903LG	CAPACITOR	1360VU	234		
904LG	CAPACITOR	1360VU	234		
905LG	CAPACITOR	1360VU	234		
907LG	DIODE	754VU	234		
908LG	DIODE	754VU	234		
909LG	DIODE	754VU	234		
910LG	DIODE	754VU	234		
911LG	DIODE	754VU	234		
912LG	DIODE	754VU	234		
913LG	DIODE	754VU	234		
914LG	DIODE	754VU	234		
915LG	DIODE	754VU	234		
	START/BALLAST UNITS		200		33-21-31
	(REF. CORRESPONDING FIGURES)				
	FLUORESCENT LAMPS		200		
	(REF. CORRESPONDING FIGURES)				

**ON A/C 101-104,

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF.
1LG1	RELAY-BC CABIN DIMMING 50%	800VU	223		
1LG2	RELAY-BC CABIN DIMMING 10%	800VU	223		
2LG1	RELAY-AC POWER CONTROL LIGHT 1+CH BC	800VU	223		
2LG2	RELAY-AC POWER CONTROL LIGHT 2 BC	800VU	223		
2LG3	RELAY-AC POWER CONTROL LIGHT 3 BC	800VU	223		
2LG4	RELAY-AC POWER CONTROL LIGHT 1 FC	800VU	223		

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF.
2LG5	RELAY-AC POWER CONTROL LIGHT 2 FC	800VU	223		
2LG6	RELAY-AC POWER CONTROL LIGHT 3 FC	800VU	223		
3LG1	P/BSW-1	789VU	221		
3LG2	P/BSW-2	789VU	221		
3LG3	P/BSW-3	789VU	221		
12LG	RELAY-AC POWER CONTROL FWD ENTRANCE	800VU	223		
13LG	RELAY-FWD ENTRANCE DIMMING 50%	800VU	223		
16LG1	P/BSW-ENTR 1 100	818VU	221		
16LG2	P/BSW-ENTR 1 50	818VU	221		
16LG3	P/BSW-ENTR 1 10	818VU	221		
16LG7	P/BSW-G 6/7 100	818VU	221		
16LG8	P/BSW-G 6/7 50	818VU	221		
16LG9	P/BSW-G 6/7 10	818VU	221		
17LG	RELAY-FWD ENTRANCE DIMMING 10%	800VU	223		
17LG1	P/BSW-FC 100	789VU	221		
17LG2	P/BSW-FC 50	789VU	221		
17LG3	P/BSW-FC 10	789VU	221		
17LG4	P/BSW-BC 100	789VU	221		
17LG5	P/BSW-BC 50	789VU	221		
17LG6	P/BSW-BC 10	789VU	221		
17LG7	P/BSW-YC 100	789VU	221		
17LG8	P/BSW-YC 50	789VU	221		
17LG9	P/BSW-YC 10	789VU	221		
493LG	RELAY-AC POWER CONTROL MID GALLEY AREA	754VU	234		
494LG	RELAY-MID GALLEY AREA DIMMING 50%	754VU	234		
495LG	RELAY-MID GALLEY AREA DIMMING 10%	754VU	234		
496LG	RELAY-AFT POWER CONTROL AFT GALLEY AREA	811VU	260		
497LG	RELAY-AFT GALLEY AREA DIMMING 50%	811VU	260		
498LG	RELAY-AFT GALLEY AREA DIMMING 10%	811VU	260		
505LG	RELAY-FC CABIN DIMMING 50%	800VU	223		
506LG	RELAY-FC CABIN DIMMING 10%	800VU	223		
515LG1	P/BSW-YC 100	866VU	261		
515LG2	P/BSW-YC 50	866VU	261		
515LG3	P/BSW-YC 10	866VU	261		
516LG1	P/BSW-BC 100	753VU	241		
516LG2	P/BSW-BC 50	753VU	241		
516LG3	P/BSW-BC 10	753VU	241		
517LG1	RELAY-AC POWER CONTROL LIGHT 1+CH YC	754VU	234		
517LG2	RELAY-AC POWER CONTROL LIGHT 1 YC	754VU	234		
517LG3	RELAY-AC POWER CONTROL LIGHT 2 YC	754VU	234		
517LG4	RELAY-AC POWER CONTROL LIGHT 3 YC	754VU	234		
521LG	RELAY-YC CABIN DIMMING 50%	754VU	234		
522LG	RELAY-YC CABIN DIMMING 10%	754VU	234		
582LG1	P/BSW-G 2/3 100	1318VU	231		
582LG2	P/BSW-G 2/3 50	1318VU	231		
582LG3	P/BSW-G 2/3 10	1318VU	231		
586LG1	P/BSW-G 6/7 100	866VU	261		
586LG2	P/BSW-G 6/7 50	866VU	261		

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF.
586LG3	P/BSW-G 6/7 10	866VU	261		
720LG	DUAL IN LINE RELAY	1360VU	234		
721LG	DUAL IN LINE RELAY	1360VU	234		
722LG	DUAL IN LINE RELAY	1360VU	234		
723LG	INTEGRATED CIRCUIT	1360VU	234		
724LG	INTEGRATED CIRCUIT	1360VU	234		
725LG	INTEGRATED CIRCUIT	1360VU	234		
726LG	DIODE	1360VU	234		
727LG	DIODE	1360VU	234		
728LG	DIODE	1360VU	234		
729LG	DIODE	1360VU	234		
730LG	DIODE	1360VU	234		
731LG	DIODE	1360VU	234		
732LG	DIODE	1360VU	234		
733LG	DIODE	1360VU	234		
734LG	DIODE	1360VU	234		
735LG	DUAL IN LINE RELAY	1360VU	234		
736LG	DUAL IN LINE RELAY	1360VU	234		
737LG	DUAL IN LINE RELAY	1360VU	234		
757LG	RELAY YC	754VU	234		
758LG	RELAY FC	754VU	234		
759LG	RELAY BC	754VU	234		
903LG	CAPACITOR	1360VU	234		
904LG	CAPACITOR	1360VU	234		
905LG	CAPACITOR	1360VU	234		
907LG	DIODE	754VU	234		
908LG	DIODE	754VU	234		
909LG	DIODE	754VU	234		
910LG	DIODE	754VU	234		
911LG	DIODE	754VU	234		
912LG	DIODE	754VU	234		
913LG	DIODE	754VU	234		
914LG	DIODE	754VU	234		
915LG	DIODE	754VU	234		
916LG	FUSE	1360VU	234		
917LG	FUSE	1360VU	234		
920LG	DUAL IN LINE RELAY	1360VU	234		
921LG	DUAL IN LINE RELAY	1360VU	234		
922LG	DUAL IN LINE RELAY	1360VU	234		
923LG	INTEGRATED CIRCUIT	1360VU	234		
924LG	INTEGRATED CIRCUIT	1360VU	234		
925LG	INTEGRATED CIRCUIT	1360VU	234		
926LG	DIODE	1360VU	234		
927LG	DIODE	1360VU	234		
928LG	DIODE	1360VU	234		
929LG	DIODE	1360VU	234		
930LG	DIODE	1360VU	234		
931LG	DIODE	1360VU	234		

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF.
932LG	DIODE	1360VU	234		
933LG	DIODE	1360VU	234		
934LG	DIODE	1360VU	234		
935LG	DUAL IN LINE RELAY	1360VU	234		
936LG	DUAL IN LINE RELAY	1360VU	234		
937LG	DUAL IN LINE RELAY	1360VU	234		
938LG	CAPACITOR	1360VU	234		
939LG	CAPACITOR	1360VU	234		
940LG	CAPACITOR	1360VU	234		
981LG	RELAY-FWD ENTRANCE	754VU	234		
982LG	RELAY-AFT GALLEY AREA	754VU	234		
983LG	RELAY-MID GALLEY AREA	754VU	234		
	START/BALLAST UNITS		200		33-21-31
	(REF. CORRESPONDING FIGURES)				
	FLUORESCENT LAMPS		200		
	(REF. CORRESPONDING FIGURES)				

**ON A/C 105-200,

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF.
1LG1	RELAY-BC CABIN DIMMING 50%	800VU	223		
1LG2	RELAY-BC CABIN DIMMING 10%	800VU	223		
2LG1	RELAY-AC POWER CONTROL LIGHT 1+CH BC	800VU	223		
2LG2	RELAY-AC POWER CONTROL LIGHT 2 BC	800VU	223		
2LG3	RELAY-AC POWER CONTROL LIGHT 3 BC	800VU	223		
2LG4	RELAY-AC POWER CONTROL LIGHT 1 BC	800VU	223		
2LG5	RELAY-AC POWER CONTROL LIGHT 2 BC	800VU	223		
2LG6	RELAY-AC POWER CONTROL LIGHT 3 BC	800VU	223		
3LG1	P/BSW-1	789VU	221		
3LG2	P/BSW-2	789VU	221		
3LG3	P/BSW-3	789VU	221		
12LG	RELAY-AC POWER CONTROL FWD ENTRANCE	800VU	223		
13LG	RELAY-FWD ENTRANCE DIMMING 50%	800VU	223		
16LG1	P/BSW-ENTR 1 100	818VU	221		
16LG2	P/BSW-ENTR 1 50	818VU	221		
16LG3	P/BSW-ENTR 1 10	818VU	221		
16LG7	P/BSW-G 6/7 100	818VU	221		
16LG8	P/BSW-G 6/7 50	818VU	221		
16LG9	P/BSW-G 6/7 10	818VU	221		
17LG	RELAY-FWD ENTRANCE DIMMING 10%	800VU	223		
17LG1	P/BSW-BC 100	789VU	221		
17LG2	P/BSW-BC 50	789VU	221		
17LG3	P/BSW-BC 10	789VU	221		
17LG4	P/BSW-M 100	789VU	221		
17LG5	P/BSW-M 50	789VU	221		

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF.
17LG6	P/BSW-M 10	789VU	221		
17LG7	P/BSW-YC 100	789VU	221		
17LG8	P/BSW-YC 50	789VU	221		
17LG9	P/BSW-YC 10	789VU	221		
493LG	RELAY-AC POWER CONTROL MID GALLEY AREA	754VU	234		
494LG	RELAY-MID GALLEY AREA DIMMING 50%	754VU	234		
495LG	RELAY-MID GALLEY AREA DIMMING 10%	754VU	234		
496LG	RELAY-AFT POWER CONTROL AFT GALLEY AREA	811VU	260		
497LG	RELAY-AFT GALLEY AREA DIMMING 50%	811VU	260		
498LG	RELAY-AFT GALLEY AREA DIMMING 10%	811VU	260		
505LG	RELAY-BC CABIN DIMMING 50%	800VU	223		
506LG	RELAY-BC CABIN DIMMING 10%	800VU	223		
515LG1	P/BSW-YC 100	866VU	261		
515LG2	P/BSW-YC 50	866VU	261		
515LG3	P/BSW-YC 10	866VU	261		
516LG1	P/BSW-M 100	753VU	241		
516LG2	P/BSW-M 50	753VU	241		
516LG3	P/BSW-M 10	753VU	241		
517LG1	RELAY-AC POWER CONTROL LIGHT 1+CH YC	754VU	234		
517LG2	RELAY-AC POWER CONTROL LIGHT 1 YC	754VU	234		
517LG3	RELAY-AC POWER CONTROL LIGHT 2 YC	754VU	234		
517LG4	RELAY-AC POWER CONTROL LIGHT 3 YC	754VU	234		
521LG	RELAY-YC CABIN DIMMING 50%	754VU	234		
522LG	RELAY-YC CABIN DIMMING 10%	754VU	234		
582LG1	P/BSW-G 2/3 100	1318VU	231		
582LG2	P/BSW-G 2/3 50	1318VU	231		
582LG3	P/BSW-G 2/3 10	1318VU	231		
586LG1	P/BSW-G 6/7 100	866VU	261		
586LG2	P/BSW-G 6/7 50	866VU	261		
586LG3	P/BSW-G 6/7 10	866VU	261		
720LG	DUAL IN LINE RELAY	1360VU	234		
721LG	DUAL IN LINE RELAY	1360VU	234		
722LG	DUAL IN LINE RELAY	1360VU	234		
723LG	INTEGRATED CIRCUIT	1360VU	234		
724LG	INTEGRATED CIRCUIT	1360VU	234		
725LG	INTEGRATED CIRCUIT	1360VU	234		
726LG	DIODE	1360VU	234		
727LG	DIODE	1360VU	234		
728LG	DIODE	1360VU	234		
729LG	DIODE	1360VU	234		
730LG	DIODE	1360VU	234		
731LG	DIODE	1360VU	234		
732LG	DIODE	1360VU	234		
733LG	DIODE	1360VU	234		
734LG	DIODE	1360VU	234		
735LG	DUAL IN LINE RELAY	1360VU	234		
736LG	DUAL IN LINE RELAY	1360VU	234		
737LG	DUAL IN LINE RELAY	1360VU	234		

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF.
757LG	RELAY YC	754VU	234		
758LG	RELAY FC	754VU	234		
759LG	RELAY BC	754VU	234		
903LG	CAPACITOR	136OVU	234		
904LG	CAPACITOR	136OVU	234		
905LG	CAPACITOR	136OVU	234		
907LG	DIODE	754VU	234		
908LG	DIODE	754VU	234		
909LG	DIODE	754VU	234		
910LG	DIODE	754VU	234		
911LG	DIODE	754VU	234		
912LG	DIODE	754VU	234		
913LG	DIODE	754VU	234		
914LG	DIODE	754VU	234		
915LG	DIODE	754VU	234		
916LG	FUSE	136OVU	234		
917LG	FUSE	136OVU	234		
920LG	DUAL IN LINE RELAY	136OVU	234		
921LG	DUAL IN LINE RELAY	136OVU	234		
922LG	DUAL IN LINE RELAY	136OVU	234		
923LG	INTEGRATED CIRCUIT	136OVU	234		
924LG	INTEGRATED CIRCUIT	136OVU	234		
925LG	INTEGRATED CIRCUIT	136OVU	234		
926LG	DIODE	136OVU	234		
927LG	DIODE	136OVU	234		
928LG	DIODE	136OVU	234		
929LG	DIODE	136OVU	234		
930LG	DIODE	136OVU	234		
931LG	DIODE	136OVU	234		
932LG	DIODE	136OVU	234		
933LG	DIODE	136OVU	234		
934LG	DIODE	136OVU	234		
935LG	DUAL IN LINE RELAY	136OVU	234		
936LG	DUAL IN LINE RELAY	136OVU	234		
937LG	DUAL IN LINE RELAY	136OVU	234		
938LG	CAPACITOR	136OVU	234		
939LG	CAPACITOR	136OVU	234		
940LG	CAPACITOR	136OVU	234		
981LG	RELAY-FWD ENTRANCE	754VU	234		
982LG	RELAY-AFT GALLEY AREA	754VU	234		
983LG	RELAY-MID GALLEY AREA	754VU	234		
	START/BALLAST UNITS		200		33-21-31
	(REF. CORRESPONDING FIGURES)				
	FLUORESCENT LAMPS		200		
	(REF. CORRESPONDING FIGURES)				

**ON A/C 001-100,

3. Description

A. System Description

(1) The illumination for the passenger compartment and entrance areas is provided by fluorescent lamps, which are supplied with power via circuit breakers and start/ballast units from the 115 V AC busbar. The illumination system is controlled from the 28 V DC busbar and from the lighting control panels 789VU and 818VU, installed at the purser's station, 752VU installed in the AFT door frame lining LH and 1318VU installed in galley 2. The system can be energized on ground, using external power, without energizing the aircraft main electrical system.

(2) The FC, YCF and YCR passenger compartment lighting is selected using P/BSW 'FC 100'(17LG1), 'YCF 100'(17LG4) or 'YCF 100'(519LG1) and 'YCR 100'(17LG7) or 'YCR 100'(515LG1).
P/BSW '1'(3LG1) controls the strips of fluorescent lamps in the LH and RH lateral stowage compartment and in the central overhead stowage compartments. P/BSW '2'(3LG2) controls the outboard lighting strips in the LH and RH ceiling panels and P/BSW '3'(3LG3) controls the inboard lighting strips in the LH and RH ceiling panels.
The fluorescent lamps in the FC passenger compartment can be dimmed to 50 percent intensity by pressing P/BSW 'FC 50'(17LG2) and to 10 percent intensity by pressing P/BSW 'FC 10'(17LG3). The illumination can be returned to 100 percent intensity by pressing P/BSW 'FC 100'(17LG1).
The fluorescent lamps in the YCF passenger compartment can be dimmed to 50 percent intensity by pressing P/BSW 'YCF 50'(17LG5) or 'YCF 50'(519LG2) and to 10 percent intensity by pressing P/BSW 'YCF 10'(17LG6) or 'YCF 10'(519LG3). The illumination can be returned to 100 percent intensity by pressing P/BSW 'YCF 100'(17LG4) or 'YCF 100'(519LG1).
The fluorescent lamps in the YCR passenger compartment can be dimmed to 50 percent intensity by pressing P/BSW 'YCR 50'(17LG8) or 'YCR 50'(515LG2) and to 10 percent intensity by pressing P/BSW 'YCR 10'(17LG9) or 'YCR 10' (515LG3). The illumination can be returned to 100 percent intensity by pressing P/BSW 'YCR 100'(17LG7) or 'YCR 100'(515LG1).

(3) The passenger entrance and galley areas are illuminated with fluorescent lamps installed in the entrance area ceiling panels and in the galley pelmet. The entrance areas and galley pelmet lighting are selected using P/BSW 'ENTR'(600LG).
The fluorescent lamps in the entrance areas and galley pelmet can be dimmed to 50 percent intensity by pressing P/BSW '50'(16LG2) and to 10 percent intensity by pressing P/BSW '10'(16LG3). The illumination can be returned to 100 percent intensity by pressing P/BSW '100'(16LG1).

(4) The fluorescent lamps in the ceiling panel at FWD entrance LH are automatically dimmed to 10% intensity, regardless of selection, whenever the flight compartment door is opened and the engine oil pressure switch has operated during engine running.

(5) Each P/BSW on panels 752VU, 789VU, 818VU and 1318VU embodies an integral light which comes on to indicate which illumination and intensity has been selected.

**ON A/C 101-104,

3. Description

A. System Description

(1) The illumination for the passenger compartment and entrance areas is provided by fluorescent lamps, which are supplied with power via circuit breakers and start/ballast units from the 115 V AC busbar. The illumination system is controlled from the 28 V DC busbar and from the lighting control panels 789VU and 818VU, installed at the purser's station, 866VU installed in the AFT door frame lining LH, 753VU installed in the door frame lining of emergency exit LH and 1318VU installed in galley 3.
The system can be energized on ground, using external power, without energizing the air craft main electrical system.

(2) The First, Business and Economy class passenger compartment lighting is selected using P/BSW 'FC 100'(17LG1),'BC 100'(17LG4) or 'BC 100'(516LG1) and 'YC 100' (17LG7) or 'YC 100'(515LG1).
P/BSW '1'(3LG1) controls the strips of fluorescent lamps in the LH and RH lateral stowage compartment and in the central overhead stowage compartments. P/BSW '2'(3LG2) controls the outboard lighting strips in the LH and RH ceiling panels and P/BSW '3'(3LG3) controls the inboard lighting strips in the LH and RH ceiling panels.
The fluorescent lamps in the FC passenger compartment can be dimmed to 50 percent intensity by pressing P/BSW 'FC 50'(17LG2) and to 10 percent intensity by pressing P/BSW 'FC 10'(17LG3). The illumination can be returned to 100 percent intensity by pressing P/BSW 'FC 100'(17LG1).
The fluorescent lamps in the Business class passenger compartment can be dimmed to 50 percent intensity by pressing P/BSW 'BC 50'(17LG5) or 'BC 50'(516LG2) and to 10 percent intensity by pressing P/BSW 'BC 10' (17LG6) or'BC 10'(516LG3). The illumination can be returned to 100 percent intensity by pressing P/BSW 'BC 100'(17LG4) or 'BC 100'(516LG1).
The fluorescent lamps in the YC passenger compartment can be dimmed to 50 percent intensity by pressing P/BSW 'YC 50'(17LG8) or 'YC 50'(515LG2) and to 10 percent intensity by pressing P/BSW 'YC 10'(17LG9) or 'YC 10' (515LG3). The illumination can be returned to 100 percent intensity by pressing P/BSW 'YC 100'(17LG7) or 'YC 100'(515LG1).

(3) The passenger entrance area and the galley areas are illuminated with fluorescent lamps installed in the entrance area ceiling panels and in the galley pelmets. The FWD entrance area, the MID galley area and the AFT galley area are selected using P/BSW 'ENTR 1 100'(16LG1), 'G 2/3 100'(582LG1) and 'G 6/7 100'(16LG7) or 'G 6/7 100'(586LG1).
The fluorescent lamps at FWD entrance area can be dimmed to 50 percent intensity by pressing P/BSW 'ENTR 1 50'(16LG2) and to 10 percent intensity by pressing P/BSW 'ENTR 1 10'(16LG3). The illumination can be returned to 100 percent intensity by pressing P/BSW 'ENTR 1 100'(16LG1).
The fluorescent lamps at MID galley area can be dimmed to 50 percent intensity by pressing P/BSW 'G 2/3 50'(582LG2) and to 10 percent intensity by pressing P/BSW 'G 2/3 10'(582LG3). The illumination can be returned to 100 percent intensity by pressing P/BSW 'G 2/3 100'(582LG1).
The fluorescent lamps at AFT galley area can be dimmed to 50 percent in-

tensity by pressing P/BSW 'G 6/7 50'(16LG8) or 'G 6/7 50'(586LG2) and to 10 percent intensity by pressing P/BSW 'G 6/7 10'(16LG9) or 'G 6/7 10' (586LG3). The illumination can be returned to 100 percent intensity by by pressing P/BSW 'G 6/7 100'(16LG7) or 'G 6/7 100'(586LG1).

(4) Each P/BSW on panels 753VU, 789VU, 818VU, 866VU and 1318VU embodies an integral light which comes on to indicate which illumination and intensity has been selected.

**ON A/C 105-200,

3. Description

A. System Description

(1) The illumination for the passenger compartment and entrance areas is provided by fluorescent lamps, which are supplied with power via circuit breakers and start/ballast units from the 115 V AC busbar. The illumination system is controlled from the 28 V DC busbar and from the lighting control panels 789VU and 818VU, installed at the purser's station, 866VU installed in the AFT door frame lining LH, 753VU installed in the door frame lining of emergency exit LH and 1318VU installed in galley 3.
The system can be energized on ground, using external power, without energizing the aircraft main electrical system.

(2) The Business and Economy class passenger compartment lighting is selected using P/BSW 'BC 100'(17LG1),'M 100'(17LG4) or 'M 100'(516LG1) and 'YC 100' (17LG7) or 'YC 100'(515LG1).
P/BSW '1'(3LG1) controls the strips of fluorescent lamps in the LH and RH lateral stowage compartment and in the central overhead stowage compartments. P/BSW '2'(3LG2) controls the outboard lighting strips in the LH and RH ceiling panels and P/BSW '3'(3LG3) controls the inboard lighting strips in the LH and RH ceiling panels.
The fluorescent lamps in the BC passenger compartment can be dimmed to 50 percent intensity by pressing P/BSW 'BC 50'(17LG2) and to 10 percent intensity by pressing P/BSW 'BC 10'(17LG3). The illumination can be returned to 100 percent intensity by pressing P/BSW 'BC 100'(17LG1).
The fluorescent lamps in the YC MID section passenger compartment can be dimmed to 50 percent intensity by pressing P/BSW 'M 50'(17LG5) or 'M 50'(516LG2) and to 10 percent intensity by pressing P/BSW 'M 10' (17LG6) or'M 10'(516LG3). The illumination can be returned to 100 percent intensity by pressing P/BSW 'M 100'(17LG4) or 'M 100'(516LG1).
The fluorescent lamps in the YC AFT section can be dimmed to 50 percent intensity by pressing P/BSW 'YC 50'(17LG8) or 'YC 50'(515LG2) and to 10 percent intensity by pressing P/BSW 'YC 10'(17LG9) or 'YC 10' (515LG3). The illumination can be returned to 100 percent intensity by pressing P/BSW 'YC 100'(17LG7) or 'YC 100'(515LG1).

(3) The passenger entrance area and the galley areas are illuminated with fluorescent lamps installed in the entrance area ceiling panels and in the galley pelmets. The FWD entrance area, the MID galley area and the AFT galley area are selected using P/BSW 'ENTR 1 100'(16LG1), 'G 2/3 100'(582LG1) and 'G 6/7 100'(16LG7) or 'G 6/7 100'(586LG1).
The fluorescent lamps at FWD entrance area can be dimmed to 50 percent intensity by pressing P/BSW 'ENTR 1 50'(16LG2) and to 10 percent inten-

sity by pressing P/BSW 'ENTR 1 10'(16LG3). The illumination can be returned to 100 percent intensity by pressing P/BSW 'ENTR 1 100'(16LG1). The fluorescent lamps at MID galley area can be dimmed to 50 percent intensity by pressing P/BSW 'G 2/3 50'(582LG2) and to 10 percent intensity by pressing P/BSW 'G 2/3 10'(582LG3). The illumination can be returned to 100 percent intensity by pressing P/BSW 'G 2/3 100'(582LG1).
The fluorescent lamps at AFT galley area can be dimmed to 50 percent intensity by pressing P/BSW 'G 6/7 50'(16LG8) or 'G 6/7 50'(586LG2) and to 10 percent intensity by pressing P/BSW 'G 6/7 10'(16LG9) or 'G 6/7 10'(586LG3). The illumination can be returned to 100 percent intensity by by pressing P/BSW 'G 6/7 100'(16LG7) or 'G 6/7 100'(586LG1).

(4)Each P/BSW on panels 753VU, 789VU, 818VU, 866VU and 1318VU embodies an integral light which comes on to indicate which illumination and intensity has been selected.

**ON A/C 001-100,

B. Component Description

(1)Start/Ballast Unit
The ballast unit is designed to provide power for one fluorescent lamp. The unit supplies the low voltage power for the fluorescent lamp filament heating and high voltage power to enable the fluorescent lamp to 'strike'. The unit output current is limited by a series capacitor circuit, the impedance of which may be increased in two steps. The change of impedance is achieved by the switching of capacitors through the contacts of two DC relays. The ballast unit provides the connection to subsequent ballast units. A fuse protects the unit from overload and is so connected that, if defective, it will not affect the operation of the subsequent ballast units.

(2)Logic Control Unit
The logic control unit comprises:
- three solid-state current impulse generators.
- three bi-stable relays.
- three mono-stable relays.
- twelve blocking diodes.
- three capacitors.

When a ground signal is applied to one of the (three) inputs 100%, 50% or 10%, the respective solid-state is triggered and it gives a short current impulse to the associated bi-stable relay 'ON' coil. Simultaneously the ground signal sets the two remaining bi-stable relays in the OFF position. The bi-stable relay which has attained the ON position, completes the ground circuit for the respective indicator light and for the associated power relays which controls the passenger compartment illumination intensity. The mono-stable relays serve the purpose of providing an electrical latch, in order to prevent selection of two levels of passenger compartment illumination intensities simultaneously, caused by malfunction of the lighting control units.

(3)Pushbutton Switches
P/BSW '1','2','3' and 'ENTR' are held, by a mechanical latching mecha-

nism, in the operating position when pressed and are released by pressing them again.
P/BSW '10' and '50' are held, by an electrical latching mechanism, in the operating position when pressed, the circuit for which is completed through the normally closed contacts of the alternative switches.
P/BSW 'FC 100','FC 50','FC 10','YCF 100','YCF 50','YCF 10','YCR 100', 'YCR 50','YCR 10' and '100' are momentary contact switches.

**ON A/C 101-200,

B. Component Description
(1)Start/Ballast Unit
The ballast unit is designed to provide power for one fluorescent lamp. The unit supplies the low voltage power for the fluorescent lamp filament heating and high voltage power to enable the fluorescent lamp to 'strike'. The unit output current is limited by a series capacitor circuit, the impedance of which may be increased in two steps. The change of impedance is achieved by the switching of capacitors through the contacts of two DC relays. The ballast unit provides the connection to subsequent ballast units. A fuse protects the unit from overload and is so connected that, if defective, it will not affect the operation of the subsequent ballast units.
(2)Logic Control Unit
The logic control unit comprises:
- six solid-state current impulse generators
- six bi-stable relays
- six mono-stable relays
- eighteen blocking diodes
- six capacitors.
- two fuses
When a ground signal is applied to one of the (three) inputs 100%, 50% or 10%, the respective solid-state is triggered and it gives a short current impulse to the associated bi-stable relay 'ON' coil. Simultaneously the ground signal sets the two remaining bi-stable relays in the OFF position. The bi-stable relay which has attained the ON position, completes the ground circuit for the respective indicator light and for the associated power relays which controls the passenger compartment illumination intensity. The mono-stable relays serve the purpose of providing an electrical latch, in order to prevent selection of two levels of passenger compartment illumination intensities simultaneously, caused by malfunction of the lighting control units.
(3)Pushbutton Switches
P/BSW '1','2' and '3' are held, by a mechanical latching mechanism, in the operating position when pressed and are released by pressing them again.
All P/BSW for the passenger compartment and the entrance area lighting are momentary contact switches.

**ON A/C 001-100,

4. Operation

A. Operation of the Passenger Compartment Illumination.
(1)Power for the fluorescent lamps is provided via circuit breakers, control relays and start/ballast units from the 115 V AC busbar.
(2)Power for the control relays and indicator lights in the P/BSW is provided from the 28 V DC busbar.
(3)With the busbar energized and circuit breakers closed the relays in the logic control unit are energized.
(4)Pressing one of the mechanically latched P/BSW '1','2' or '3' selects a group of lighting strips.
(5)On pressing the momentary-action P/BSW marked 'FC 100' a ground is completed for the solid-state in the logic control unit and the associated relay 758LG is de-energized.
(6)A ground return is completed for the AC power control relays which are energized and supply all start/ballast units of the selected light strips in the FC passenger compartment with 115 V AC.
(7)The associated fluorescent lamps come on with 100 percent intensity.
(8)The logic control unit also completes the ground for the 'FC 100' indicator light which comes on.
(9)If the initial selection is 50% or 10% illumination intensity, on pressing the P/BSW marked 'FC 50' or 'FC 10', the following actions occur:
(a)A ground is completed for solid-state 50% or 10% in the logic control unit and the associated relay 758LG remains de-energized.
(b)A ground return is completed for the AC power control relays which are energized and supply all start/ballast units of the selected light strips in the FC passenger compartment with 115 V AC.
(c)The logic control unit also completes a ground return for the DC power control relays 50% or 10% which are energized and supply all start/ballast units in the FC passenger compartment with 28 V DC.
(d)A relay in the start/ballast unit is energized and the fluorescent lamp comes on at the selected intensity.
(e)The indicator light in the selected P/BSW comes on.
(f)When 50% or 10% intensity is selected, after selection 100% intensity, the logic control unit will energize the DC power control relay and disconnect the ground return for the 100% indicator light.
(10)On pressing the last selected intensity control P/BSW again, the following actions occur:
(a)A ground return is completed for the logic control unit, and the associated relay 758LG is energized.
(b)The AC and DC power control relays are de-energized and the fluorescent lamps go off.
(c)The indicator light in the intensity control P/BSW goes off.
(11)In addition to the control facilities on the main lighting control panel, for controlling the FC, YCF and YCR passenger compartments, control panels are installed adjacent to the emergency exit door LH to control the YCF passenger compartment and in the AFT door frame lining to control the YCR passenger compartment.
The main lighting control panel and the additional control panels are connected in parallel to the logic control unit. The P/BSW on the addi-

tional panel have similar markings and identical function to the controls on the main lighting control panel.

(12)The operation for the YCF and YCR passenger compartment lighting is identical to the FC passenger compartment lighting operation. The lighting in the individual areas (FC, YCF, YCR) assumes the intensity which is last selected from either panel by the corresponding P/BSW.

**ON A/C 101-104,

4. Operation

A. Operation of the Passenger Compartment Illumination.

(1)Power for the fluorescent lamps is provided via circuit breakers, control relays and start/ballast units from the 115 V AC busbar.

(2)Power for the control relays and indicator lights in the P/BSW is provided from the 28 V DC busbar.

(3)With the busbar energized and circuit breakers closed the relays in the logic control unit are energized.

(4)Pressing one of the mechanically latched P/BSW '1','2' or '3' selects a group of lighting strips.

(5)On pressing the momentary-action P/BSW marked 'FC 100' a ground is completed for the solid-state in the logic control unit and the associated relay 758LG is de-energized.

(6)A ground return is completed for the AC power control relays which are energized and supply all start/ballast units of the selected light strips in the FC passenger compartment with 115 V AC.

(7)The associated fluorescent lamps come on with 100 percent intensity.

(8)The logic control unit also completes the ground for the 'FC 100' indicator light which comes on.

(9)If the initial selection is 50% or 10% illumination intensity, on pressing the P/BSW marked 'FC 50' or 'FC 10', the following actions occur:

(a)A ground is completed for solid-state 50% or 10% in the logic control unit and the associated relay 758LG remains de-energized.

(b)A ground return is completed for the AC power control relays which are energized and supply all start/ballast units of the selected light strips in the FC passenger compartment with 115 V AC.

(c)The logic control unit also completes a ground return for the DC power control relays 50% or 10% which are energized and supply all start/ballast units in the FC passenger compartment with 28 V DC.

(d)A relay in the start/ballast unit is energized and the fluorescent lamp comes on at the selected intensity.

(e)The indicator light in the selected P/BSW comes on.

(f)When 50% or 10% intensity is selected, after selection 100% intensity, the logic control unit will energize the DC power control relay and disconnect the ground return for the 100% indicator light.

(10)On pressing the last selected intensity control P/BSW again, the following actions occur:

(a)A ground return is completed for the logic control unit, and the associated relay 758LG is energized.

(b)The AC and DC power control relays are de-energized and the fluorescent lamps go off.
(c)The indicator light in the intensity control P/BSW goes off.

(11)In addition to the control facilities on the main lighting control panel, for controlling the FC, BC and YC passenger compartments, control panels are installed adjacent to the emergency exit door LH to control the BC passenger compartment and in the AFT door frame lining to control the YC passenger compartment.
The main lighting control panel and the additional control panels are connected in parallel to the logic control unit. The P/BSW on the additional panel have similar markings and identical function to the controls on the main lighting control panel.

(12)The operation for the BC and YC passenger compartment lighting is identical to the FC passenger compartment lighting operation. The lighting in the individual areas (FC, BC, YC) assumes the intensity which is last selected from either panel by the corresponding P/BSW.

**ON A/C 105-200,

4. Operation

A. Operation of the Passenger Compartment Illumination.
(1)Power for the fluorescent lamps is provided via circuit breakers, control relays and start/ballast units from the 115 V AC busbar.
(2)Power for the control relays and indicator lights in the P/BSW is provided from the 28 V DC busbar.
(3)With the busbar energized and circuit breakers closed the relays in the logic control unit are energized.
(4)Pressing one of the mechanically latched P/BSW '1','2' or '3' selects a group of lighting strips.
(5)On pressing the momentary-action P/BSW marked 'BC 100' a ground is completed for the solid-state in the logic control unit and the associated relay 758LG is de-energized.
(6)A ground return is completed for the AC power control relays which are energized and supply all start/ballast units of the selected light strips in the FC passenger compartment with 115 V AC.
(7)The associated fluorescent lamps come on with 100 percent intensity.
(8)The logic control unit also completes the ground for the 'BC 100' indicator light which comes on.
(9)If the initial selection is 50% or 10% illumination intensity, on pressing the P/BSW marked 'BC 50' or 'BC 10', the following actions occur:
(a)A ground is completed for solid-state 50% or 10% in the logic control unit and the associated relay 758LG remains de-energized.
(b)A ground return is completed for the AC power control relays which are energized and supply all start/ballast units of the selected light strips in the FC passenger compartment with 115 V AC.
(c)The logic control unit also completes a ground return for the DC power control relays 50% or 10% which are energized and supply all start/ballast units in the BC passenger compartment with 28 V DC.

(d)A relay in the start/ballast unit is energized and the fluorescent lamp comes on at the selected intensity.
(e)The indicator light in the selected P/BSW comes on.
(f)When 50% or 10% intensity is selected, after selection 100% intensity, the logic control unit will energize the DC power control relay and disconnect the ground return for the 100% indicator light.

(10)On pressing the last selected intensity control P/BSW again, the following actions occur:
(a)A ground return is completed for the logic control unit, and the associated relay 758LG is energized.
(b)The AC and DC power control relays are de-energized and the fluorescent lamps go off.
(c)The indicator light in the intensity control P/BSW goes off.

(11)In addition to the control facilities on the main lighting control panel, for controlling the BC and YC passenger compartments, control panels are installed adjacent to the emergency exit door LH to control the YC in the MID section and in the AFT door frame lining to control the YC in the AFT section.
The main lighting control panel and the additional control panels are connected in parallel to the logic control unit. The P/BSW on the additional panel have similar markings and identical function to the controls on the main lighting control panel.

(12)The operation for the BC and YC passenger compartment lighting is identical. The lighting in the individual areas (BC, YC) assumes the intensity which is last selected from either panel by the corresponding P/BSW.

**ON A/C 001-100,

(Ref. Fig. 012)

**ON A/C 101-104,

(Ref. Fig. 013)

**ON A/C 105-200,

(Ref. Fig. 014)

**ON A/C 001-100,

(Ref. Fig. 015)

**ON A/C 101-104,

(Ref. Fig. 016)

**ON A/C 105-200,

(Ref. Fig. 017)

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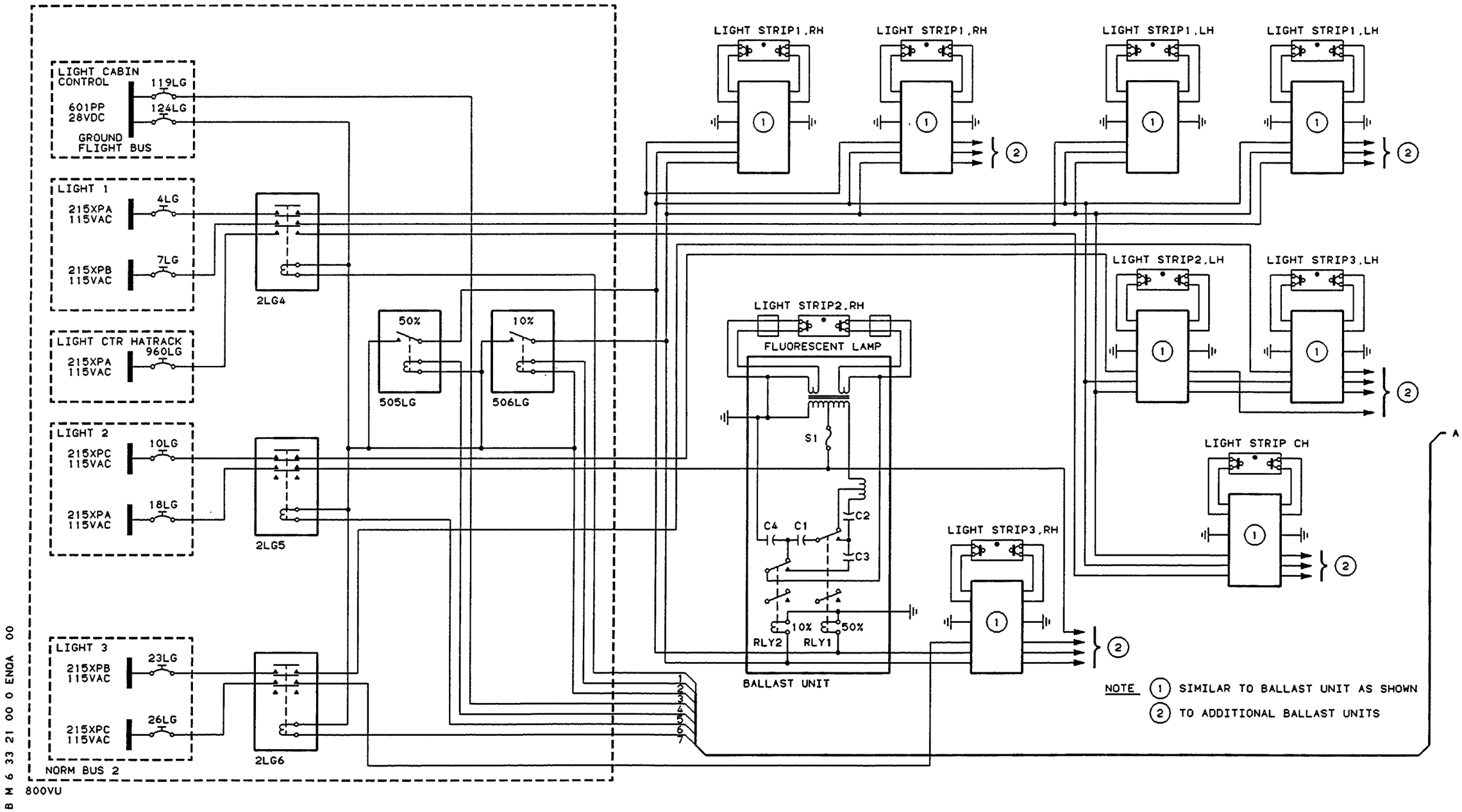
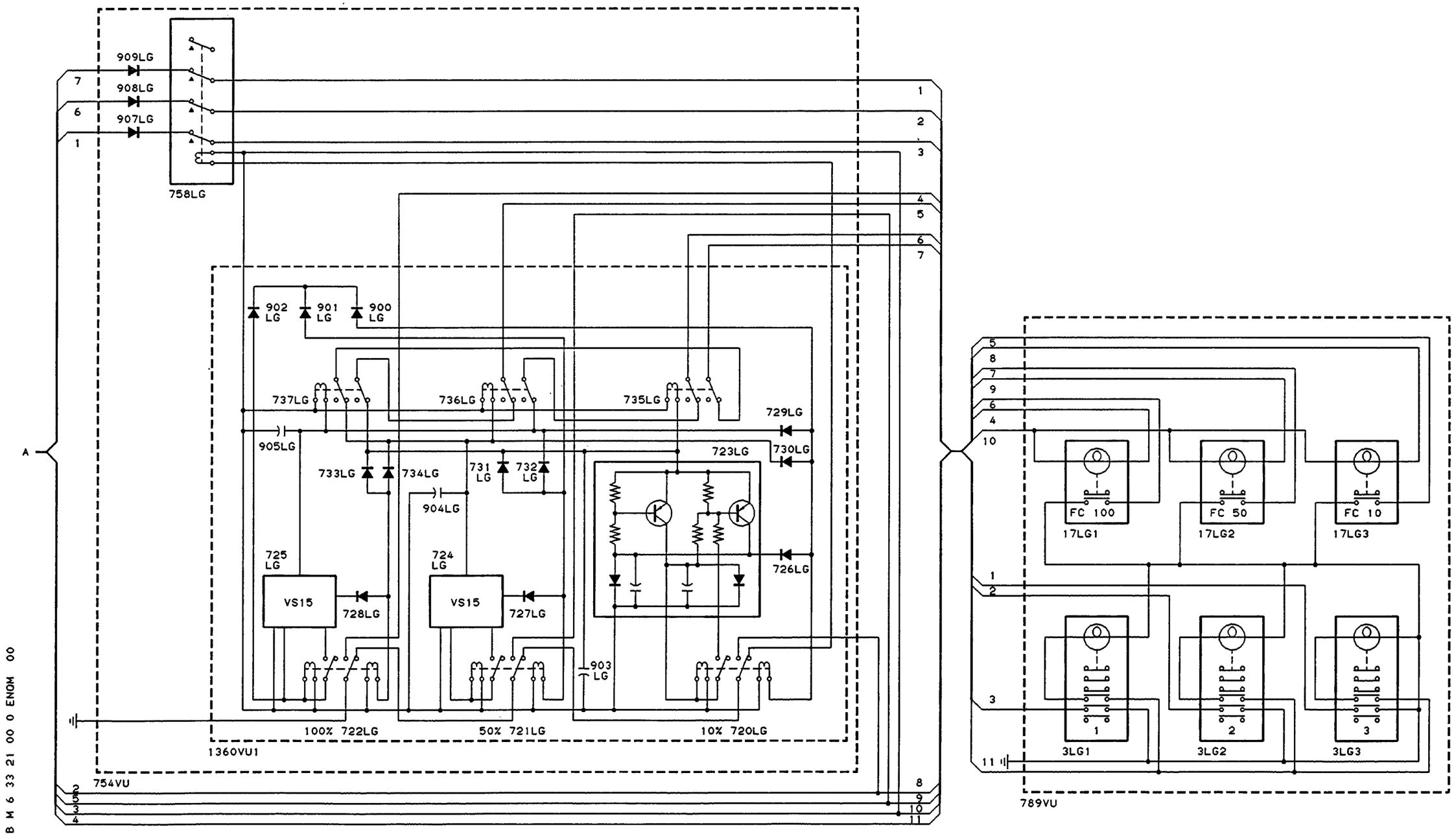
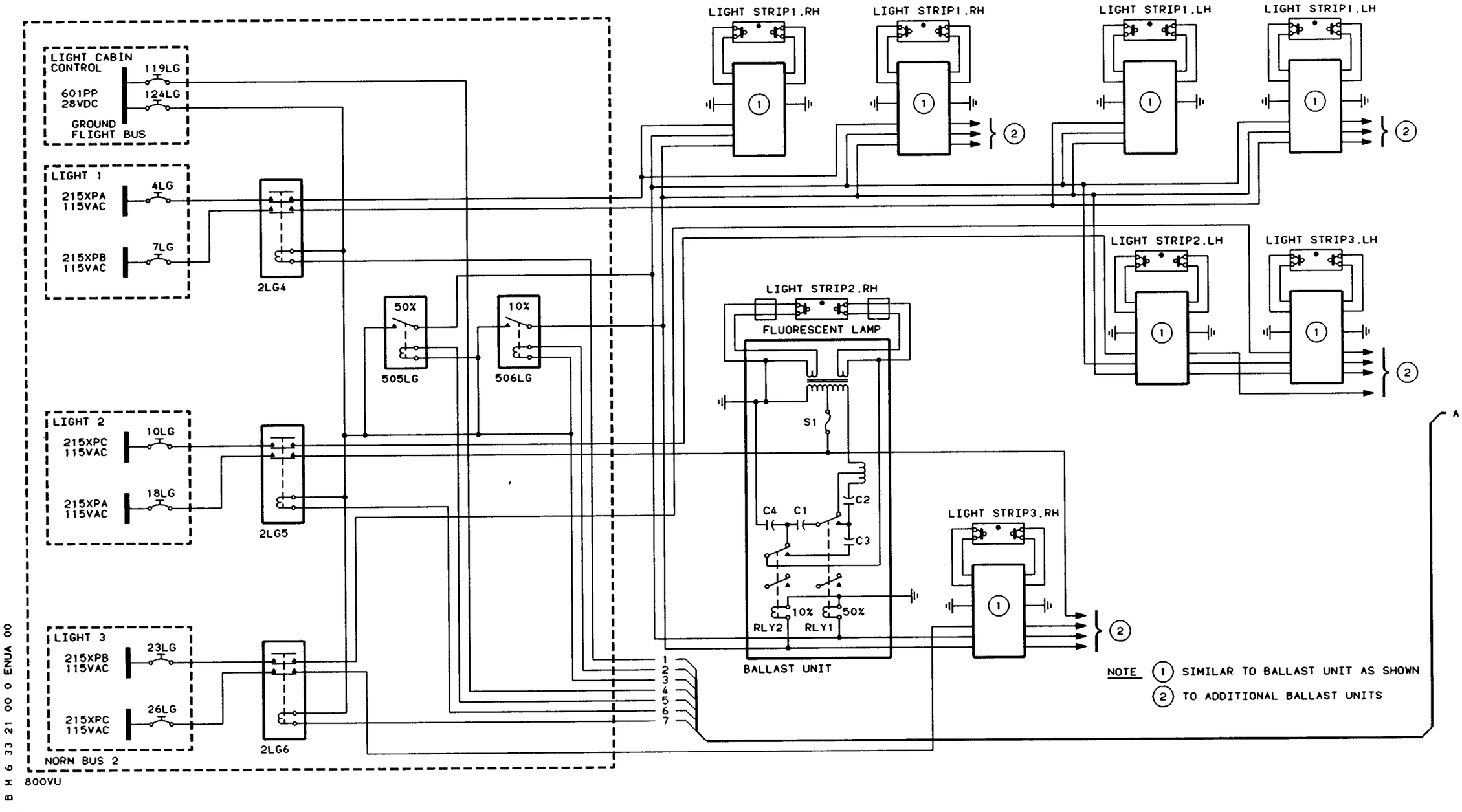


B M 6 33 21 00 0 ENOA 00

FC Passenger Compartment Lighting - Schematic (Sheet 1/2)
Figure 012

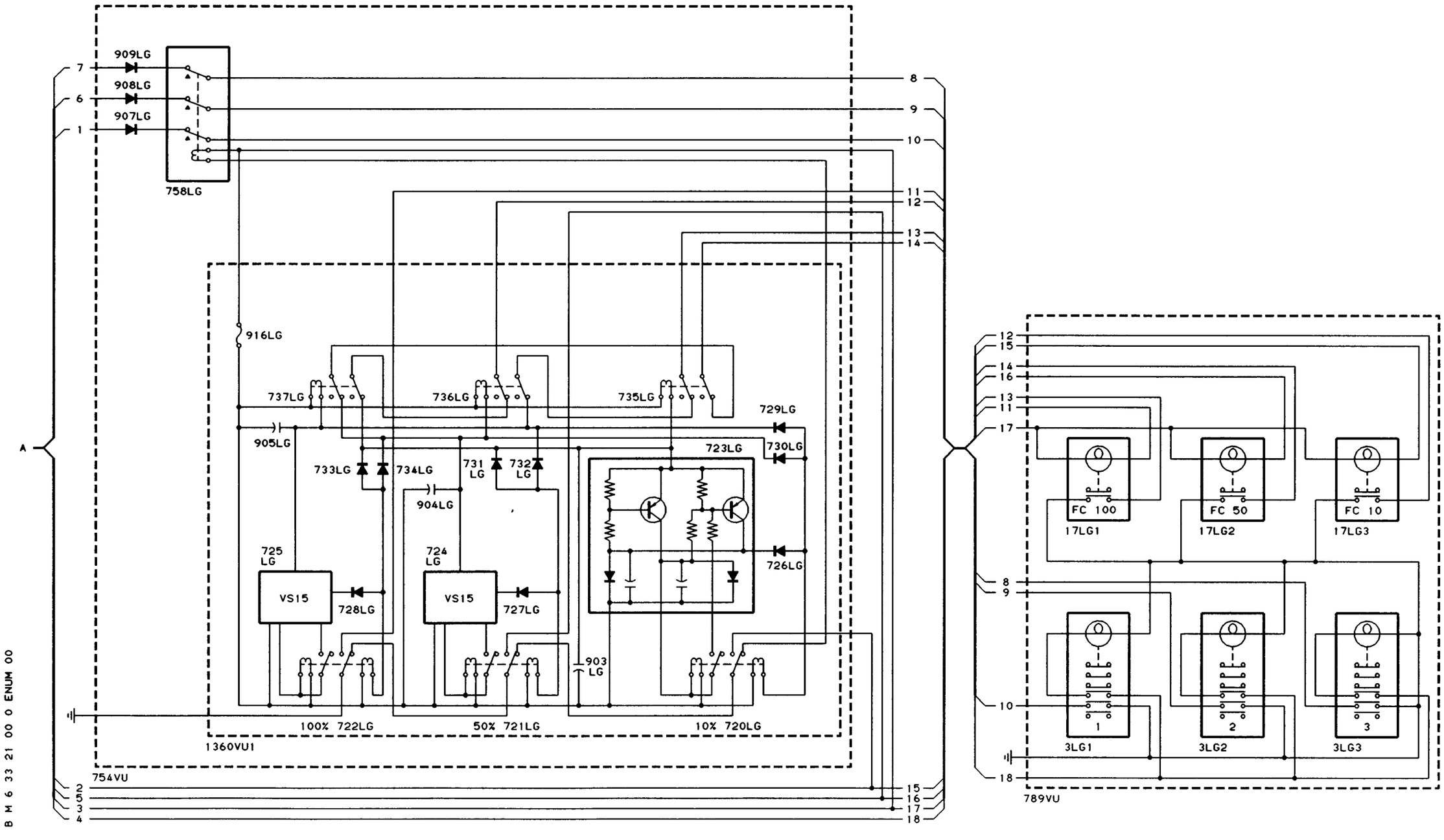


FC Passenger Compartment Lighting - Schematic (Sheet 2/2)
Figure 012

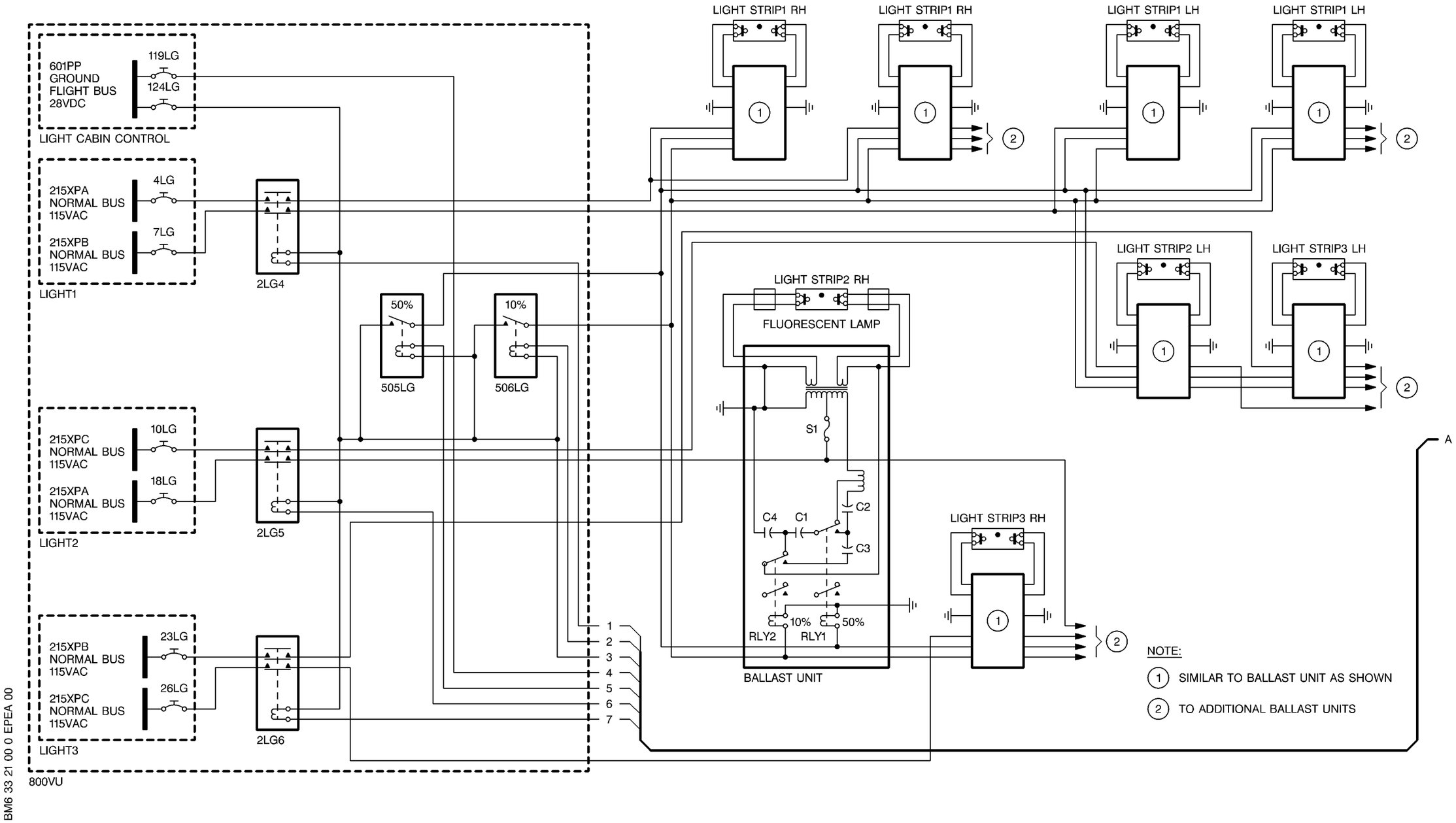


B M 6 33 21 00 0 ENUA 00

FC Passenger Compartment Lighting - Schematic (Sheet 1/2)
Figure 013



FC Passenger Compartment Lighting - Schematic (Sheet 2/2)
Figure 013



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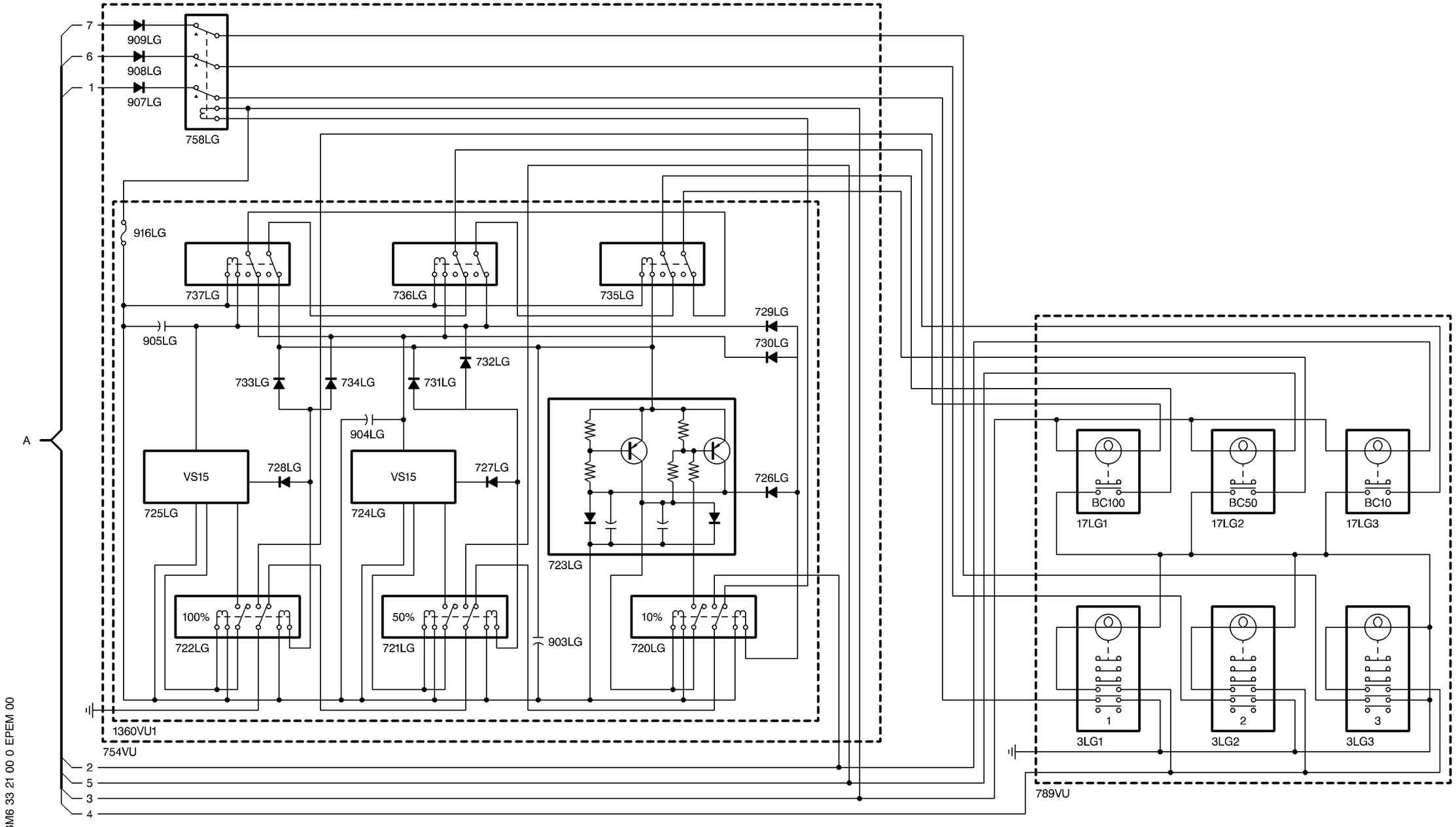
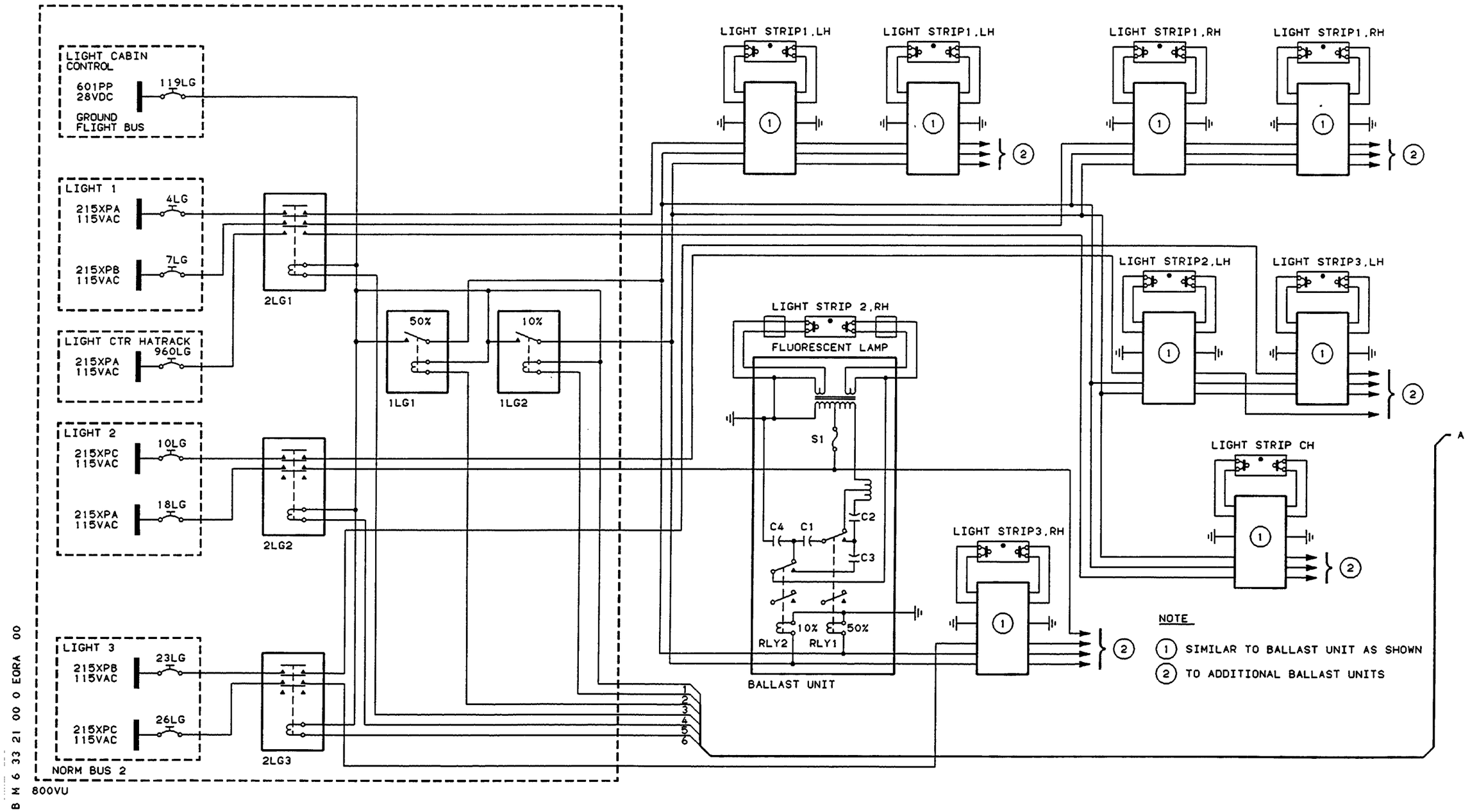
BC Passenger Compartment Lighting - Schematic (Sheet 1/2)
Figure 014

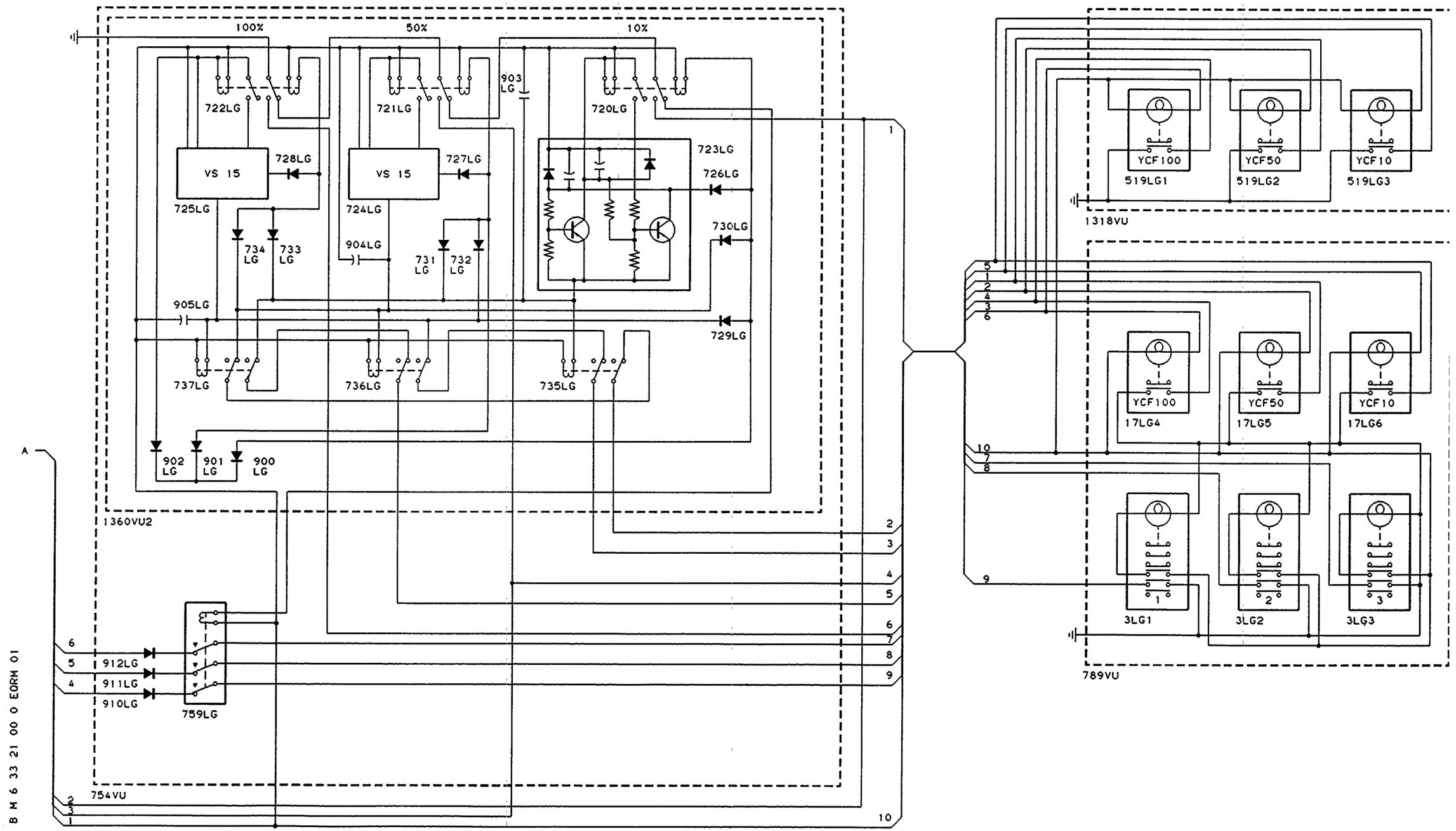


BC Passenger Compartment Lighting - Schematic (Sheet 2/2)
Figure 014

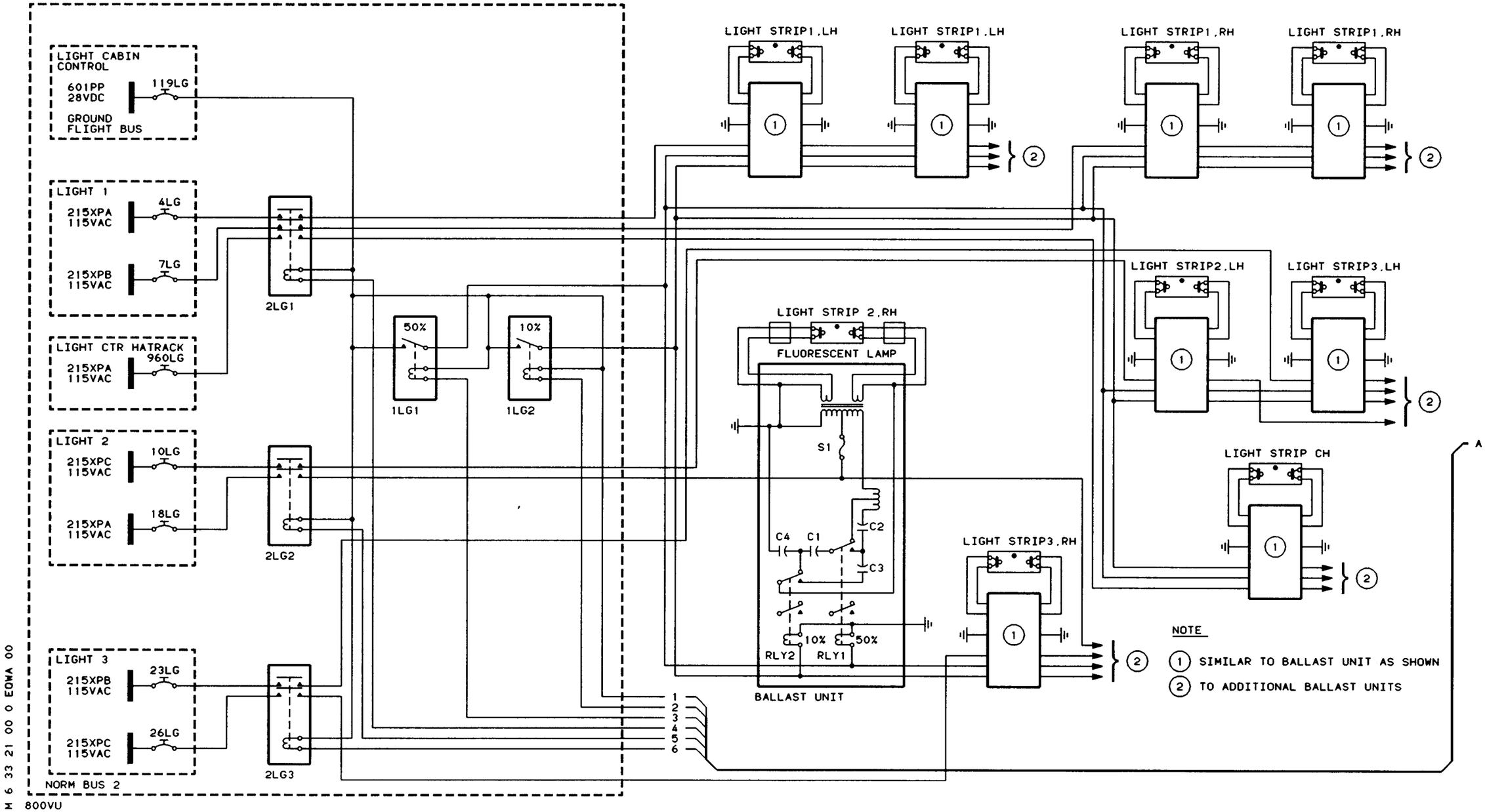


B M 6 33 21 00 0 EQRA 00

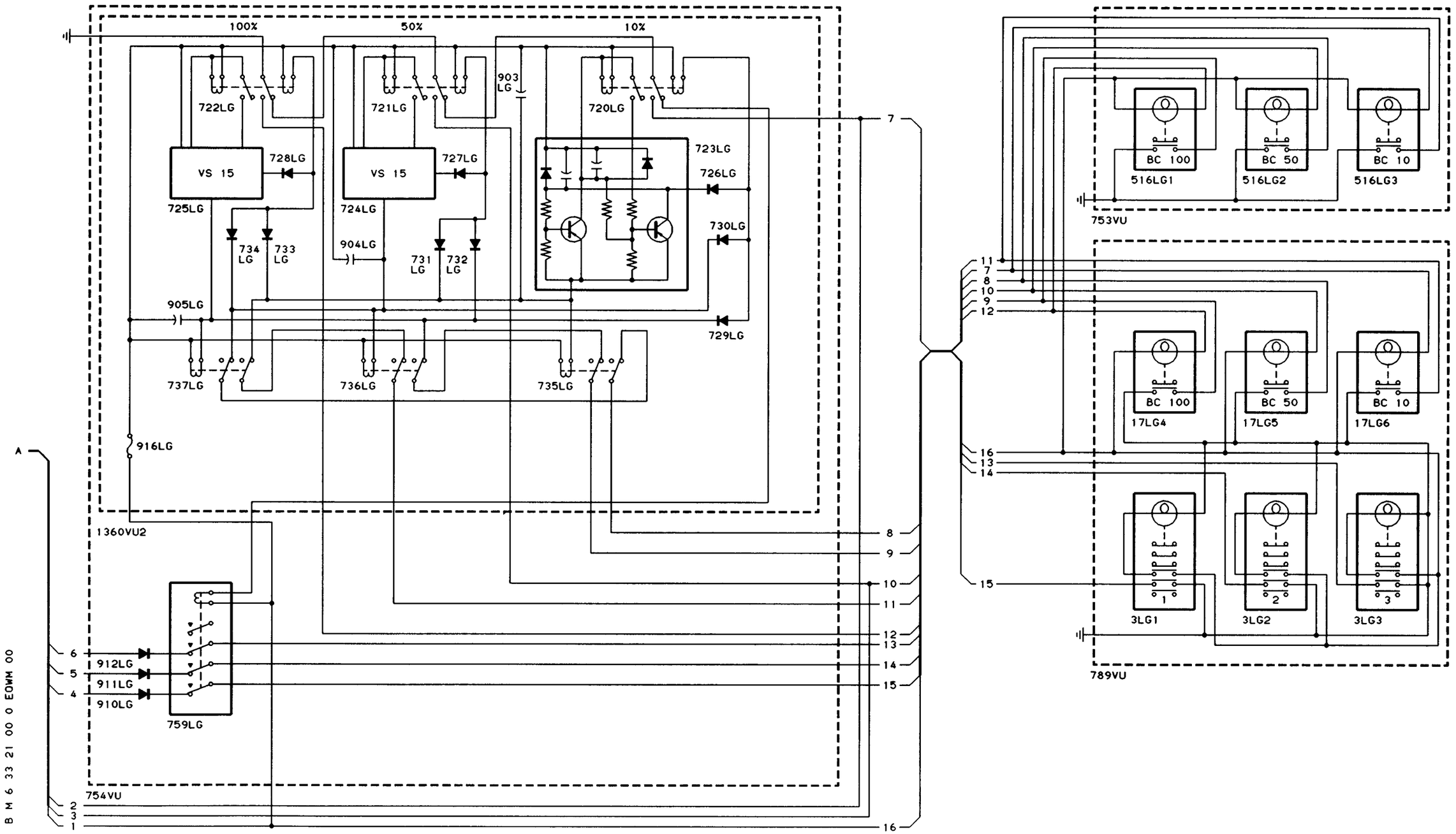
YCF Passenger Compartment Lighting - Schematic (Sheet 1/2)
Figure 015



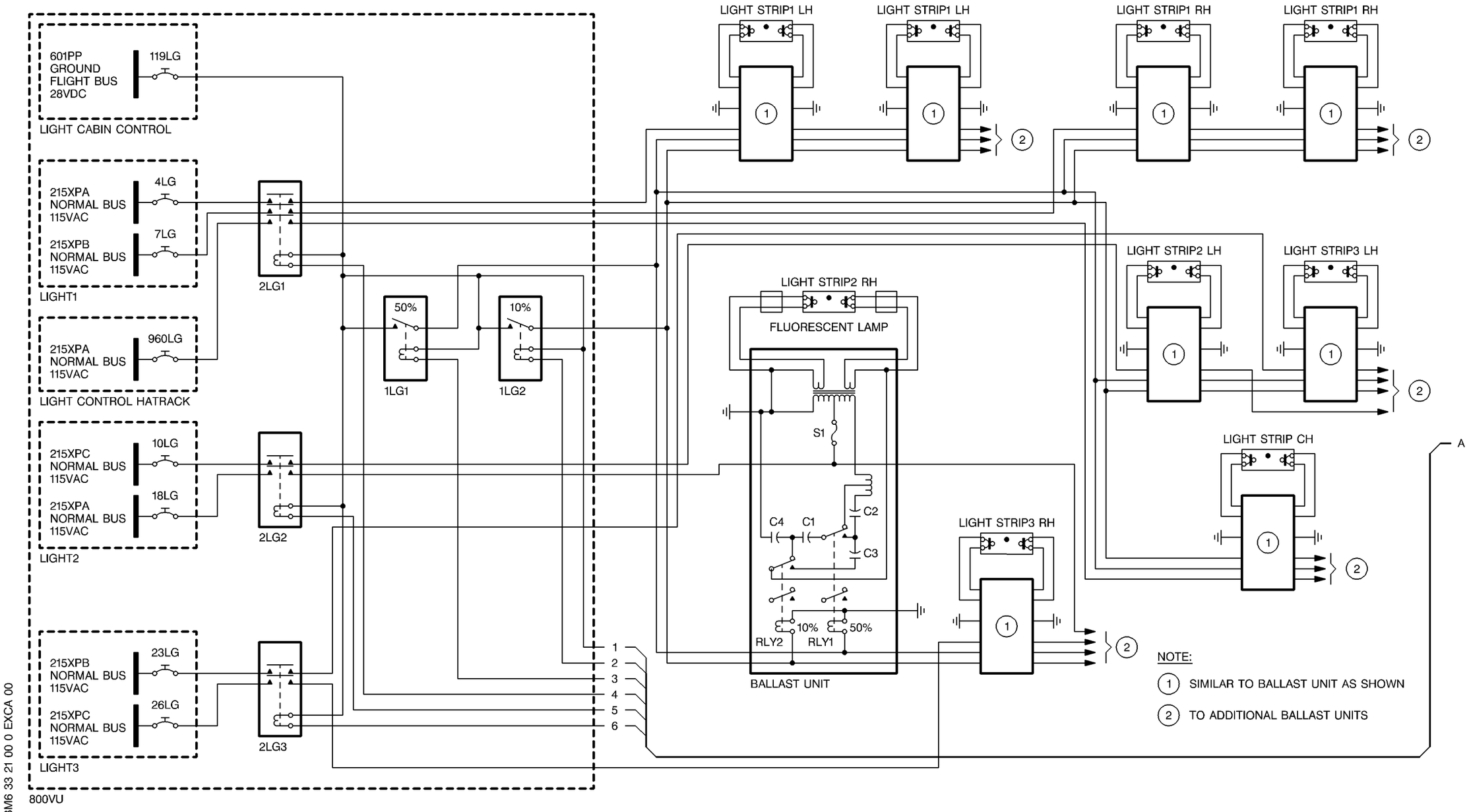
YCF Passenger Compartment Lighting - Schematic (Sheet 2/2)
Figure 015



BC Passenger Compartment Lighting - Schematic (Sheet 1/2)
Figure 016

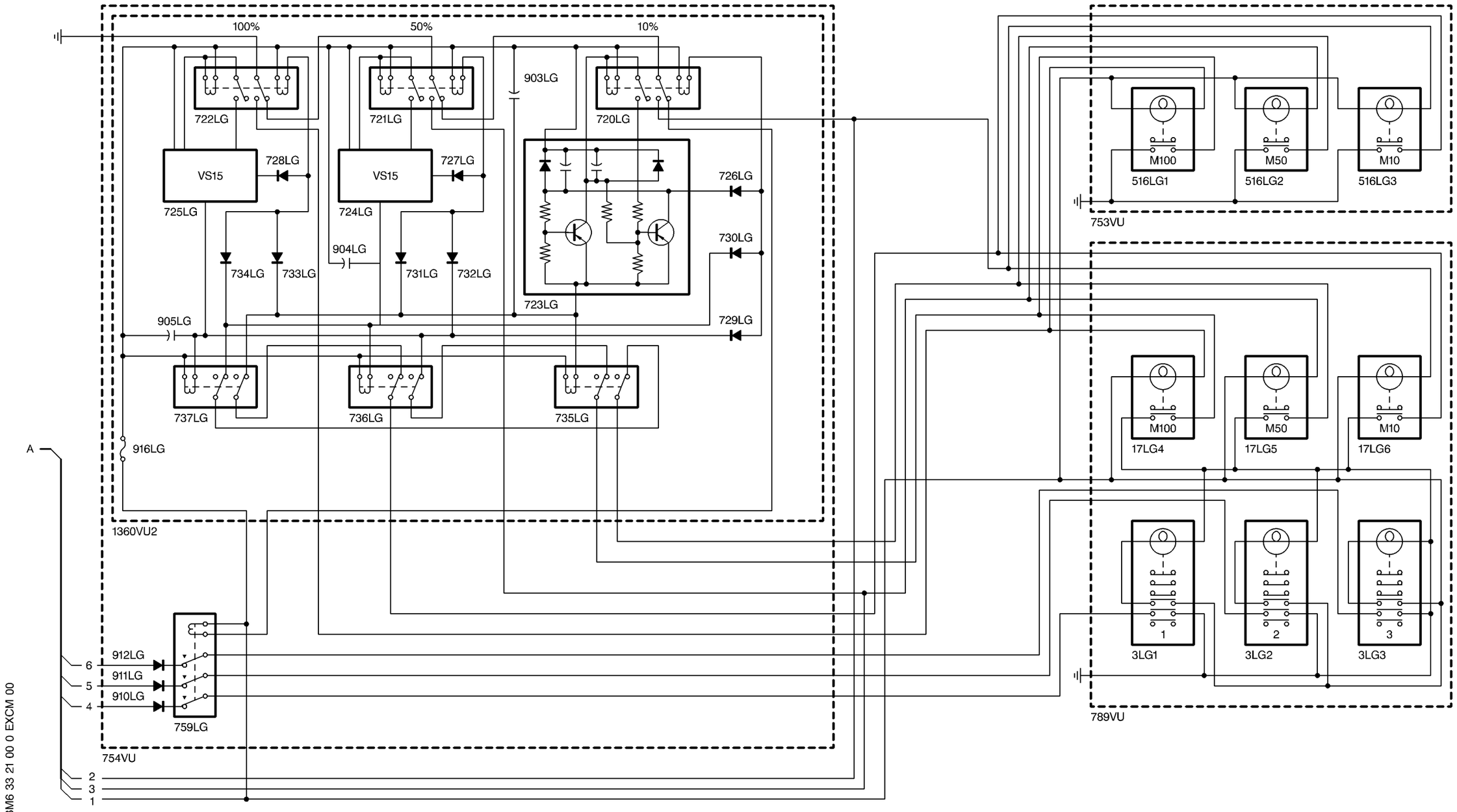


BC Passenger Compartment Lighting - Schematic (Sheet 2/2)
Figure 016



BM6 33 21 00 0 EXCA 00

MID Section Passenger Compartment Lighting - Schematic
(Sheet 1/2)
Figure 017



MID Section Passenger Compartment Lighting - Schematic
(Sheet 2/2)
Figure 017

**ON A/C 001-100,

(Ref. Fig. 018)

**ON A/C 101-200,

(Ref. Fig. 019)

**ON A/C 001-100,

B. Operation of Entrance Area Lighting
(1)Power for the fluorescent lamps is provided via circuit breakers, control relays and start/ballast units from the 115 V AC busbar.
(2)Power for the control relays and indicator lights in P/BSW is provided from the 28 V DC busbar.
(3)On pressing P/BSW 'ENTR', a ground is completed for the associated AC power control relay which energizes and supplies all start/ballast units of the entrance area lighting system. The entrance area and galley pelmet lighting comes on with 100% intensity and the integral lights 'ENTR' and '100' come on.
(4)On pressing one of the P/BSW marked '50' or '10' the following actions occur:
(a)A ground is completed for the associated dimming relay, which energizes and supplies all start/ballast units with 28 V DC.
(b)The selected P/BSW latching circuit is completed through its own contacts, the contacts in the alternative illumination intensity selection P/BSW and P/BSW '100'.
(c)The indicator light in the selected P/BSW comes on and the indicator light in P/BSW '100' goes off.
(d)A relay in the start/ballast units is energized and the fluorescent lamps are dimmed to the selected intensity.
(5)With the engines running and the flight compartment door open, a relay in 849VU is energized. The start/ballast units in FWD ceiling panel LH (849VU) are supplied with28 V DC and the lighting is dimmed to 10% intensity, regardless of selection.
(6)Pressing P/BSW 'ENTR' again, causes the associated relays to be de-energized and the latching circuit is broken. The entrance area lighting and all affected indicator lights go off.

**ON A/C 101-200,

B. Operation of Entrance Area Lighting
(1)Power for the fluorescent lamps is provided via circuit breakers, control relays and start/ballast units from the 115 V AC busbar.
(2)Power for the control relays and indicator lights in P/BSW is provided from the 28 V DC busbar.
(3)With the busbar energized and circuit breakers closed the relays in the logic control unit are energized.
(4)On pressing the momentary-action P/BSW marked 'ENTR 1 100' a ground is completed for the solid-state in the logic control unit and the asso-

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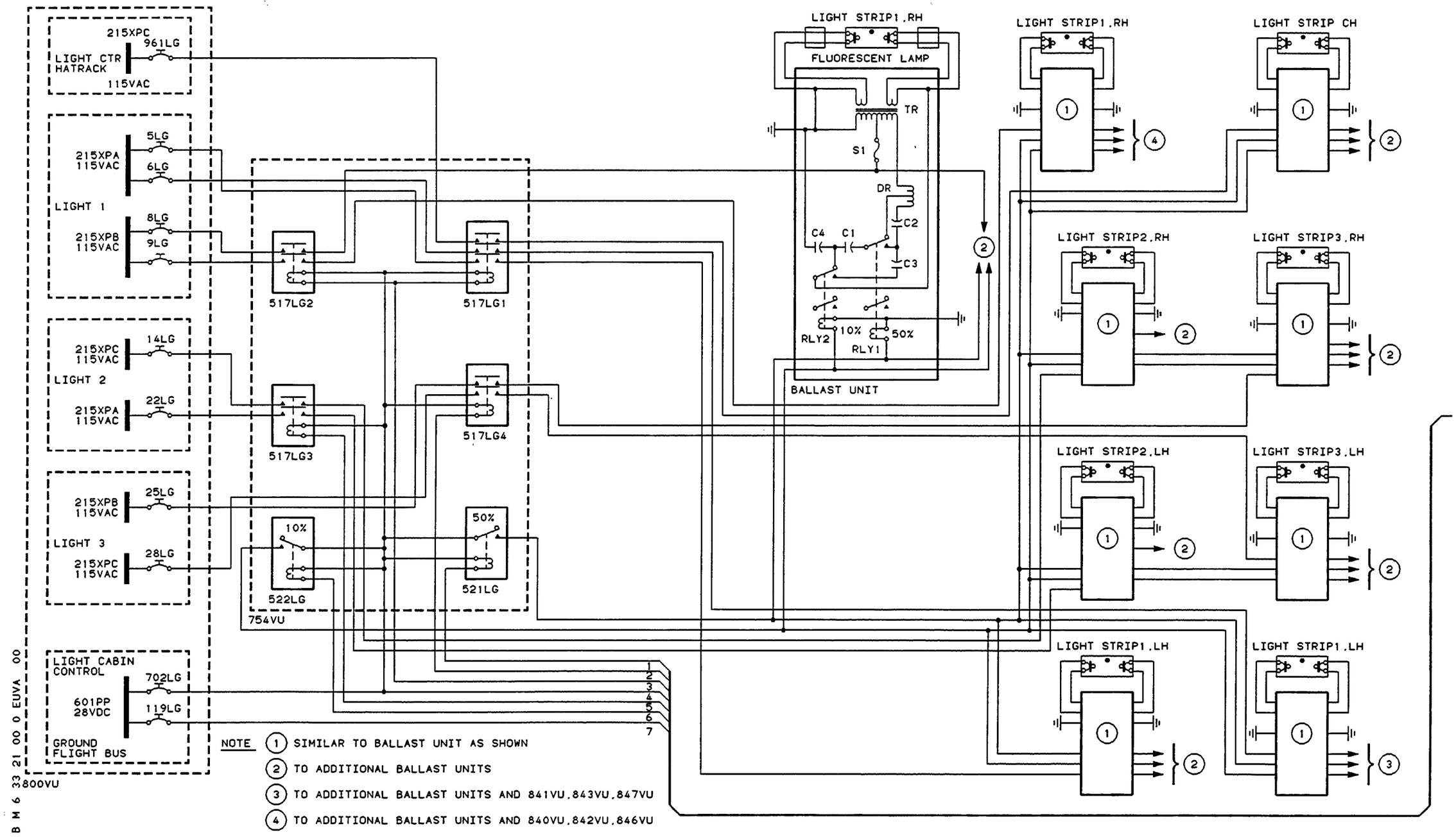
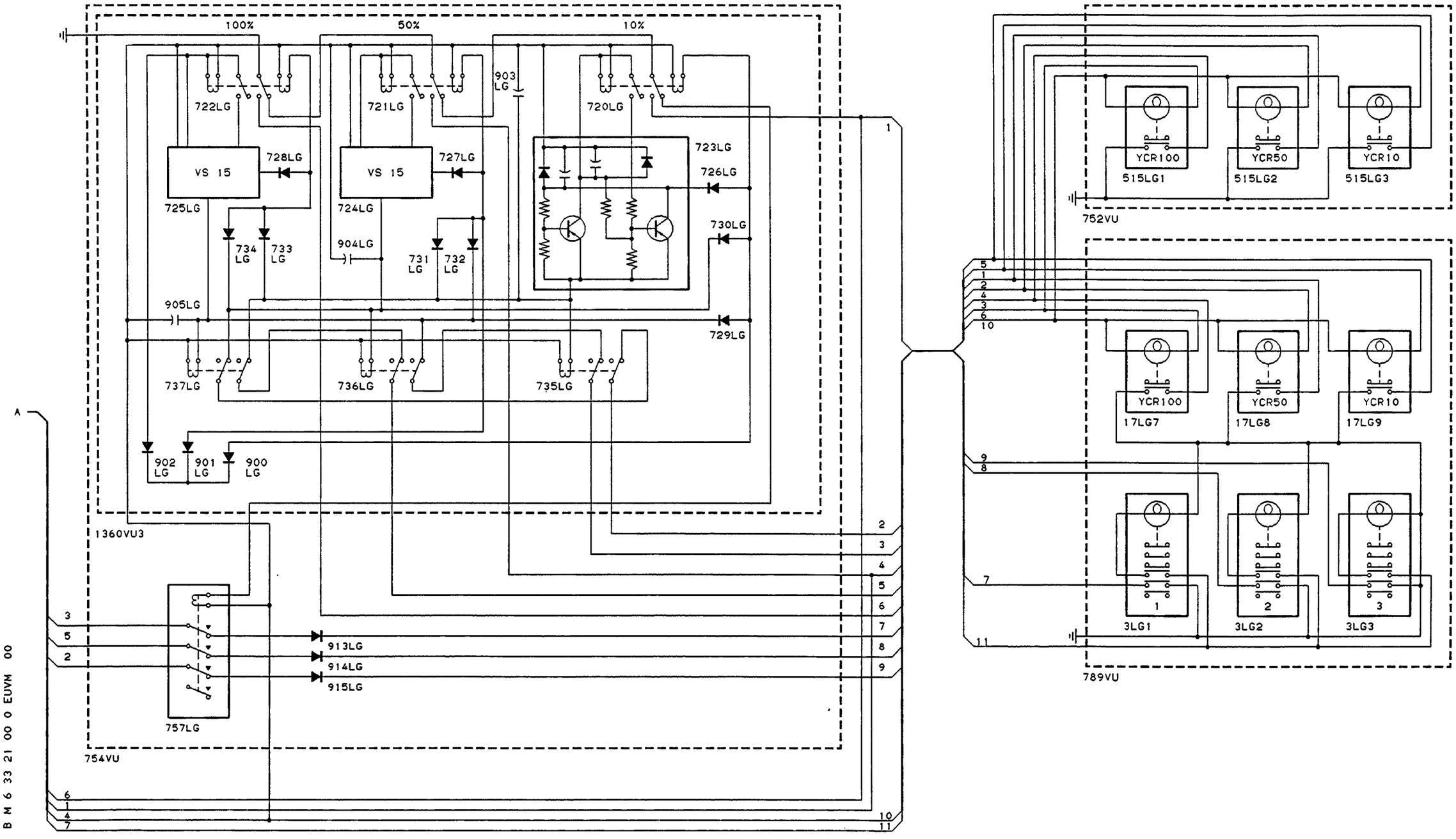
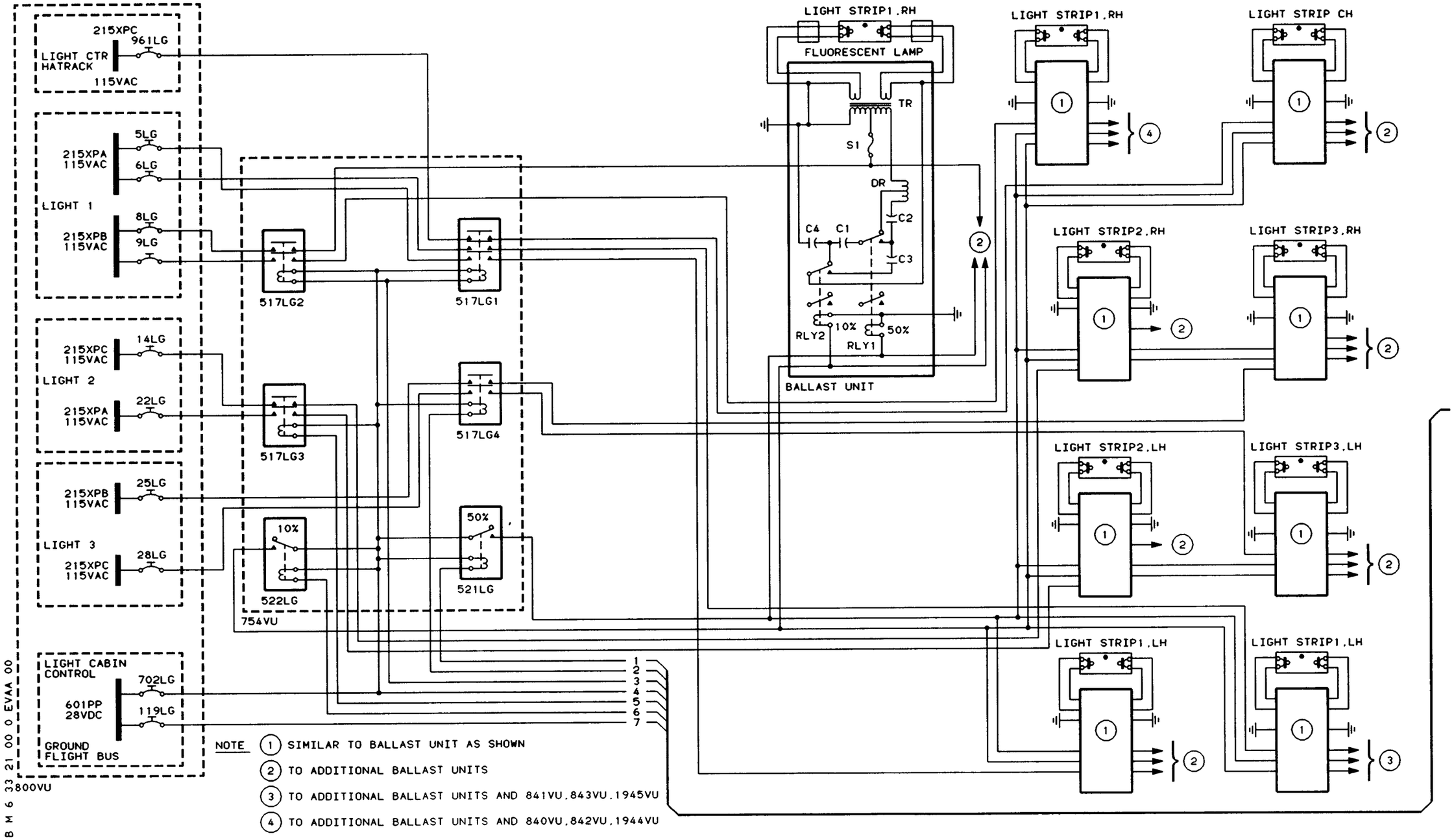


B M 6 33 21 00 0 EUVA 00

YCR Passenger Compartment Lighting - Schematic (Sheet 1/2)
Figure 018



YCR Passenger Compartment Lighting - Schematic (Sheet 2/2)
Figure 018



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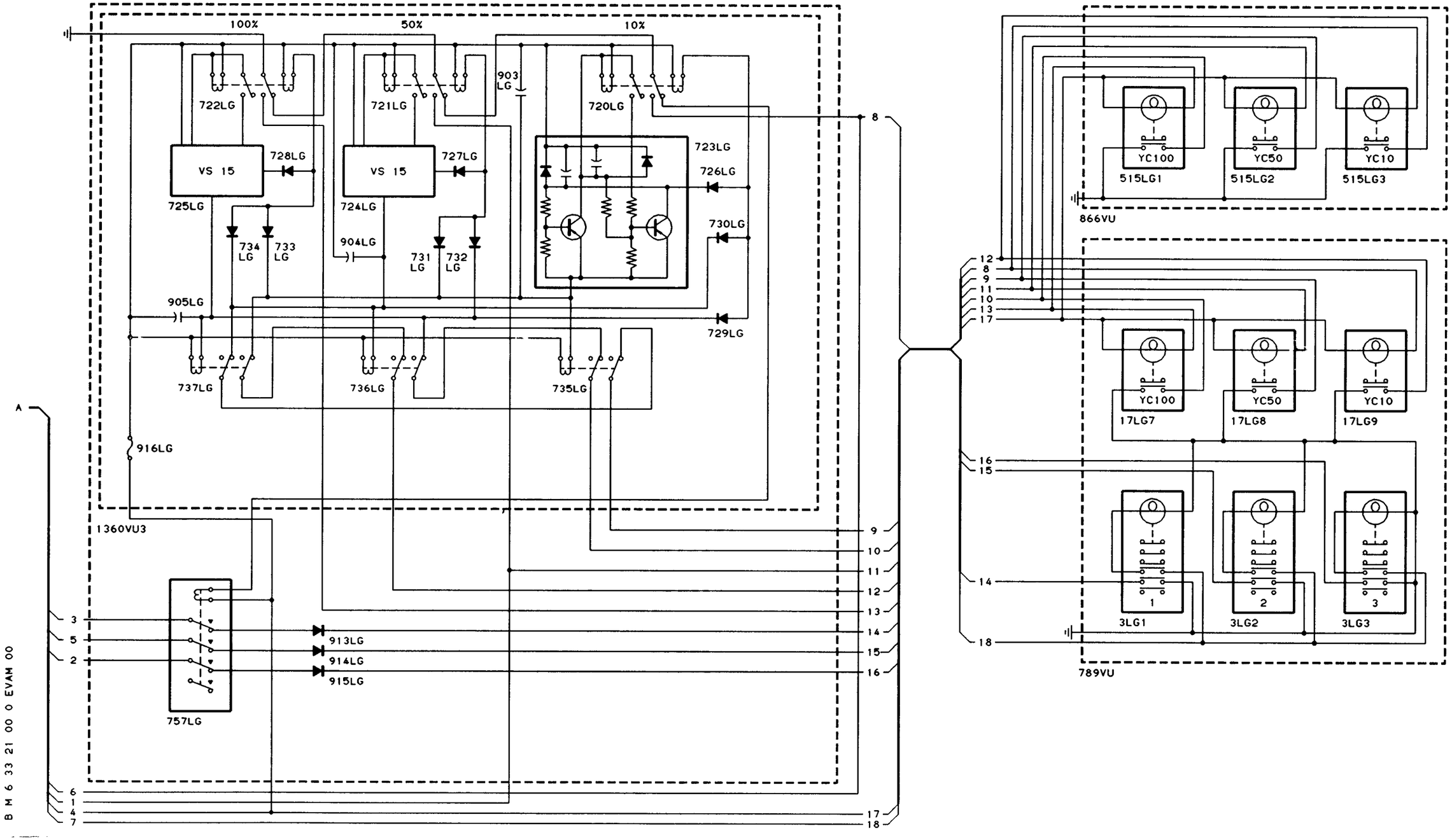
YC Passenger Compartment Lighting - Schematic (Sheet 1/2)
Figure 019



YC Passenger Compartment Lighting - Schematic (Sheet 2/2)
Figure 019

ciated relay 981LG is de-energized.

(5)A ground return is completed for the AC power control relay which is energized and supplies all start/ballast units allocated to the FWD entrance area with 115 V AC.

(6)The associated fluorescent lamps come on with 100 percent intensity.

(7)The logic control unit also completes the ground for the 'ENTR 1 100' indicator light which comes on.

(8)If the initial selection is 50% or 10% illumination intensity, on pressing the P/BSW marked 'ENTR 1 50' or 'ENTR 1 10' the following actions occur:

(a)A ground is completed for solid-state 50% or 10% in the logic control unit and the associated relay 981LG remains de-energized.

(b)A ground return is completed for the AC power control relay which is energized and supplies all start/ballast units allocated to the FWD entrance area with 115 V AC.

(c)The logic control unit also completes a ground return for the DC power control relays 50% or 10% which are energized and supply all start/ ballast units in the FWD entrance area with 28 V DC.

(d)A relay in the start/ballast unit is energized and the fluorescent lamp comes on at the selected intensity.

(e)The indicator light in the selected P/BSW comes on.

(f)When 50% or 10% intensity is selected after selecting 100% intensity, the logic control unit will energize the DC power control relay and disconnect the ground return for the 100% indicator light.

(9)On pressing the last selected intensity control P/BSW again, the following actions occur:

(a)A ground return is completed for the logic control unit, and the associated relay 981LG is energized.

(b)The AC and DC power control relays are de-energized and the fluorescent lamps go off.

(c)The indicator light in the intensity control P/BSW goes off.

(10)In addition to the control facilities on the main lighting control panel, for controlling the FWD entrance area and the AFT galley area, control panels are installed in galley 3 to control the MID galley area lighting and in the AFT door frame lining to control the AFT galley area lighting. The main lighting control panel and the additional panels are connected in parallel to the logic control unit. The P/BSW on the additional panels have identical functions to the controls on the main lighting control panel.

The operation for the MID and AFT galley area lighting is identical to the FWD entrance area lighting operation. The lighting in the individual areas assumes the intensity which is last selected from either panel by the corresponding P/BSW.

**ON A/C 001-100,

(Ref. Fig. 020)

**ON A/C 101-200,

(Ref. Fig. 021)

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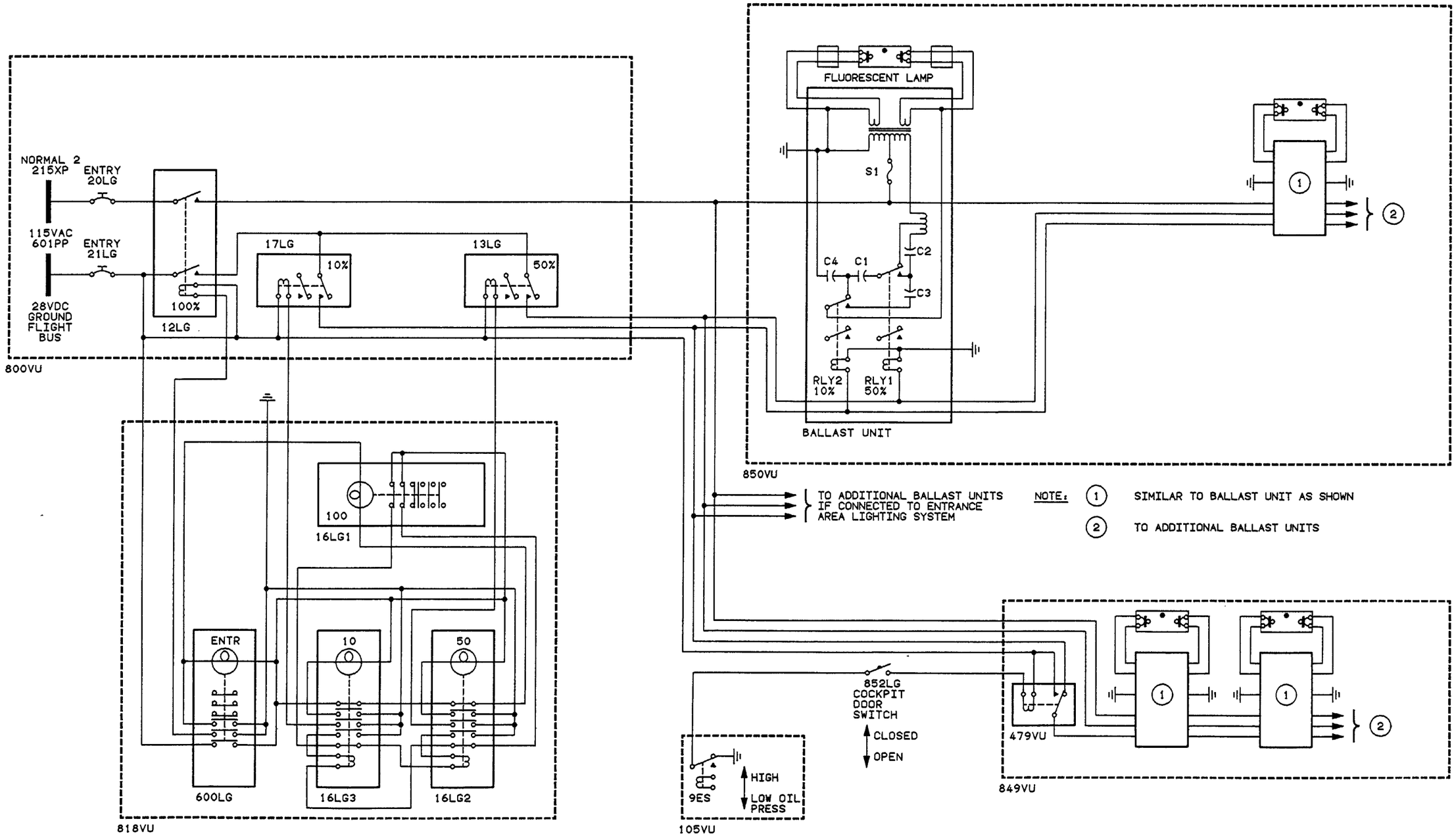
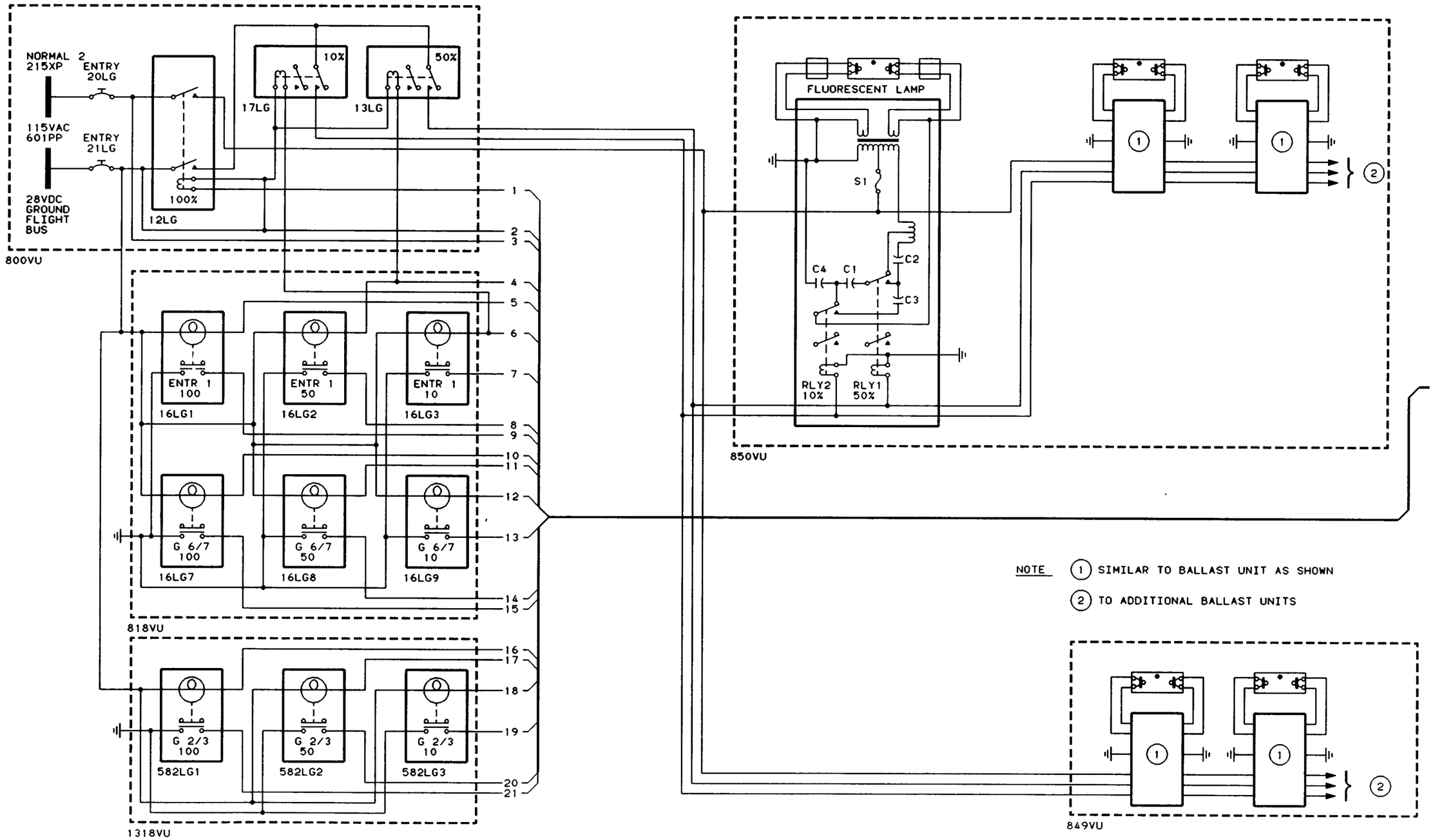


Entrance Area Lighting - Schematic
Figure 020



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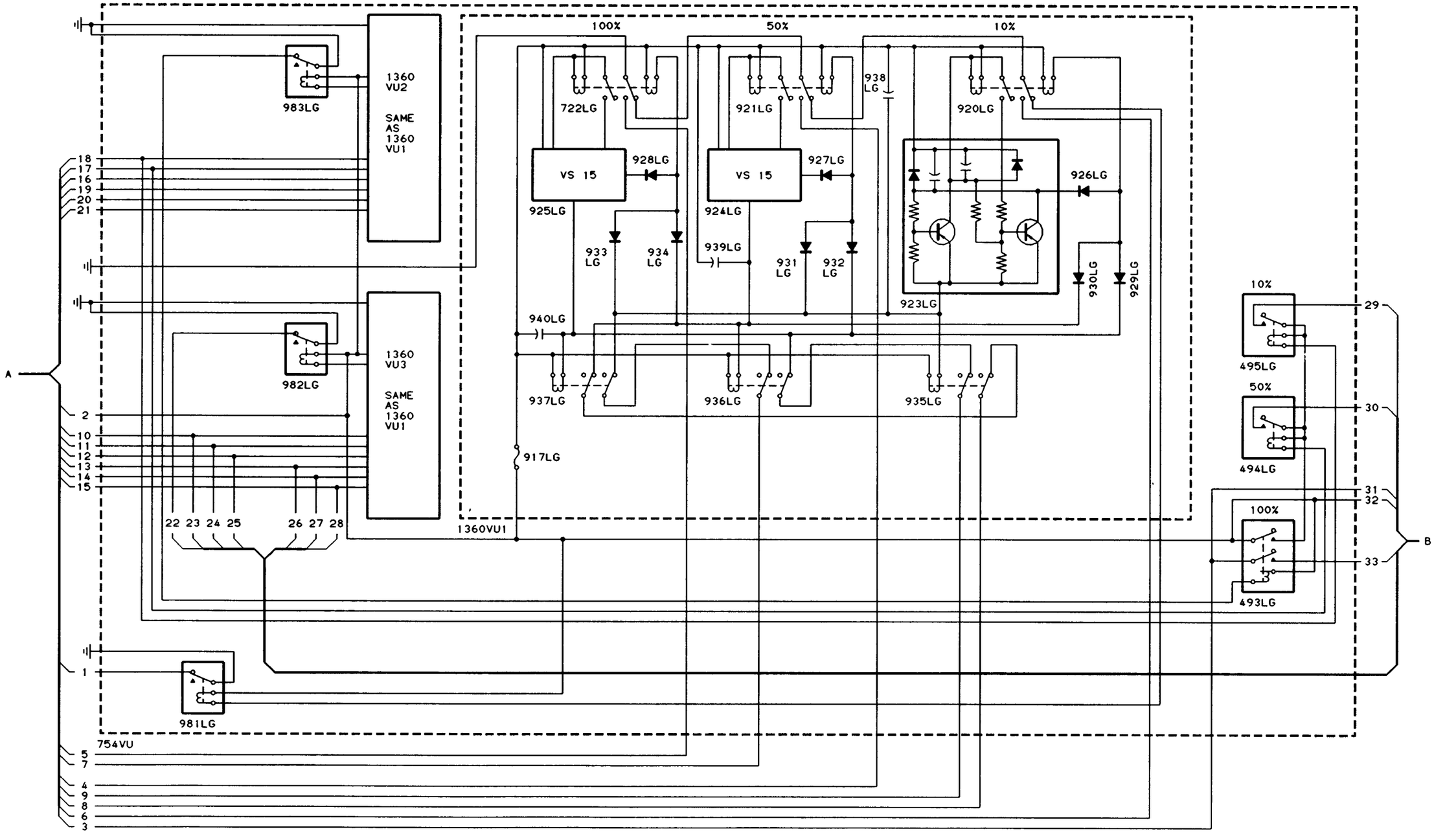
Entrance Area Lighting - Schematic (Sheet 1/3)
Figure 021



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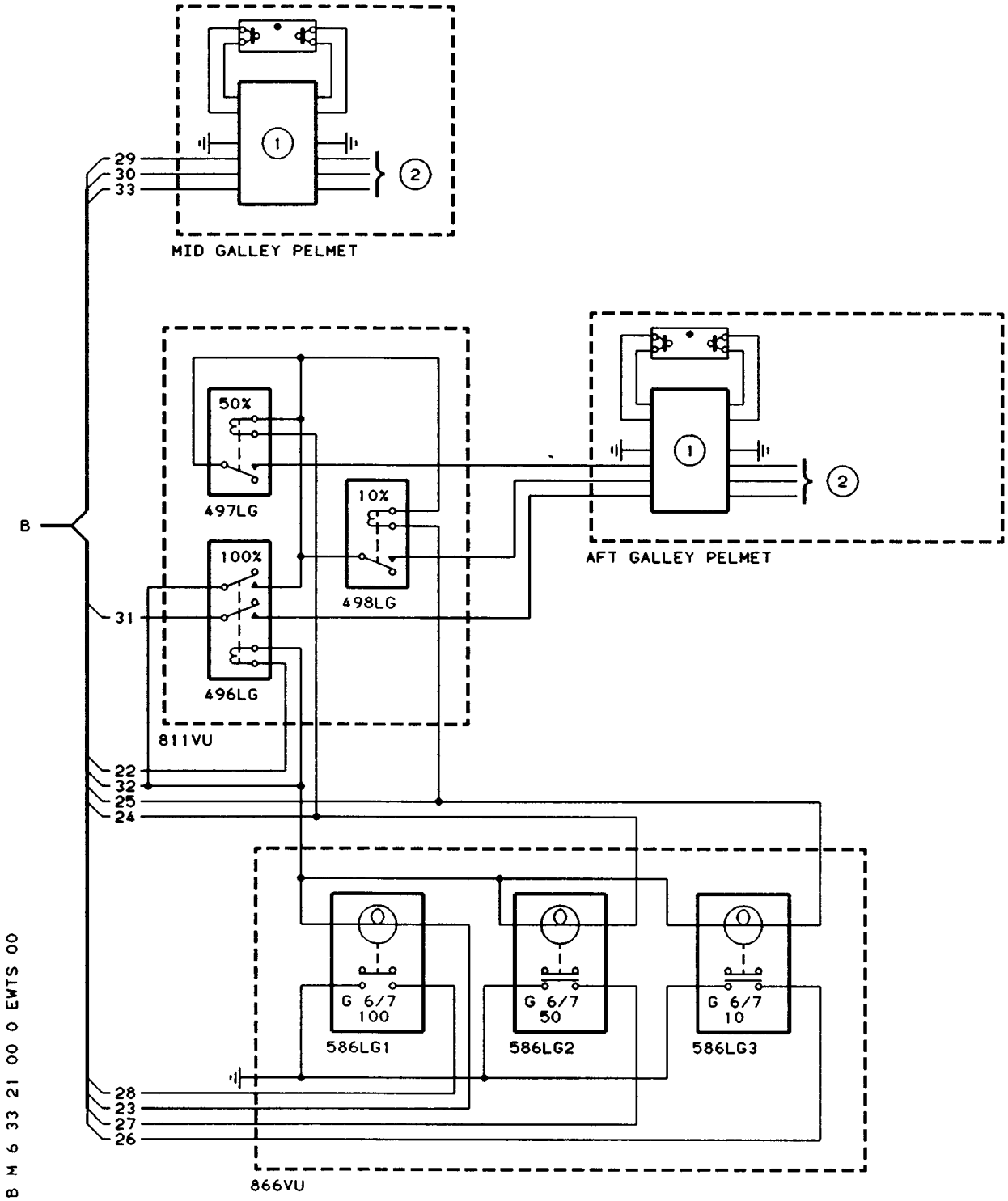
Entrance Area Lighting - Schematic (Sheet 2/3)
Figure 021



Entrance Area Lighting - Schematic (Sheet 3/3)
Figure 021

1. Operational Test

**ON A/C 001-100,

A. Reasons for the Job
(1)Test of First Class (FC) passenger compartment lighting
(2)Test of Economy Class Forward (YCF) passenger compartment lighting
(3)Test of Economy Class Rear (YCR) passenger compartment lighting
(4)Test of entrance lighting

R **ON A/C 101-104,

A. Reasons for the Job
(1)Test of First Class (FC) passenger compartment lighting
(2)Test of Business Class (BC) passenger compartment lighting
(3)Test of Economy Class (YC) passenger compartment lighting
(4)Test of entrance lighting

R **ON A/C 105-200,

R A. Reasons for the Job
R (1)Test of Business Class (BC), FWD section of passenger compartment
R lighting
R (2)Test of Economy Class (YC), MID section of passenger compartment lighting
R (3)Test of Economy Class (YC), AFT section of passenger compartment lighting
R (4)Test of entrance lighting

**ON A/C ALL

B. Equipment and Materials

ITEM	DESIGNATION
(1)	Electrical Ground Power Unit - 3-Phase, 115/200 V, 400 Hz
Referenced Procedure - 24-41-00, P. Block 301	AC External Power Control

C. Procedure
(1)Job Set-Up
(a)Connect electrical ground power unit and energize aircraft electrical network (Ref. 24-41-00, P. Block 301).
(b)Make certain that electronics racks ventilation is correct.

**ON A/C 001-100,

(c)Make certain that the following circuit breakers are closed:

PANEL	SERVICE	IDENT.	LOCATION
800VU	CABIN LIGHT POWER - LIGHT 3	23LG	A 1
800VU	CABIN LIGHT POWER - LIGHT 3	25LG	A 3
800VU	CABIN LIGHT POWER - LIGHT 3	26LG	A 4
800VU	CABIN LIGHT POWER - LIGHT 3	28LG	A 6
800VU	CABIN LIGHT POWER - CTR HATRACK	960LG	A 7
800VU	CABIN LIGHT POWER - CTR HATRACK	961LG	A 8
800VU	CABIN LIGHT POWER - ENTRY	20LG	A 9
800VU	CABIN LIGHT CONTR - ENTRY	21LG	A10
800VU	CABIN LIGHT CONTR - CABIN	702LG	A11
800VU	CABIN LIGHT CONTR - CABIN	119LG	A12
800VU	CABIN LIGHT CONTR - CABIN	124LG	A13
800VU	CABIN LIGHT POWER - LIGHT 1	4LG	B 1
800VU	CABIN LIGHT POWER - LIGHT 1	5LG	B 2
800VU	CABIN LIGHT POWER - LIGHT 1	6LG	B 3
800VU	CABIN LIGHT POWER - LIGHT 1	7LG	B 4
800VU	CABIN LIGHT POWER - LIGHT 1	8LG	B 5
800VU	CABIN LIGHT POWER - LIGHT 1	9LG	B 6
800VU	CABIN LIGHT POWER - LIGHT 2	10LG	B 8
800VU	CABIN LIGHT POWER - LIGHT 2	14LG	B10
800VU	CABIN LIGHT POWER - LIGHT 2	18LG	B11
800VU	CABIN LIGHT POWER - LIGHT 2	22LG	B13

**ON A/C 101-200,

(c)Make certain that the following circuit breakers are closed:

PANEL	SERVICE	IDENT.	LOCATION
800VU	CABIN LIGHT POWER - LIGHT 3	23LG	A 1
800VU	CABIN LIGHT POWER - LIGHT 3	25LG	A 3
800VU	CABIN LIGHT POWER - LIGHT 3	26LG	A 4
800VU	CABIN LIGHT POWER - LIGHT 3	28LG	A 6
800VU	CABIN LIGHT POWER - CTR HATRACK	960LG	A 7
800VU	CABIN LIGHT POWER - CTR HATRACK	961LG	A 8
800VU	CABIN LIGHT POWER - ENTRY	20LG	A 9
800VU	CABIN LIGHT CTL - ENTRY	21LG	A10
800VU	CABIN LIGHT CTL - CABIN	702LG	A11
800VU	CABIN LIGHT CTL - CABIN	119LG	A12
800VU	CABIN LIGHT CTL - CABIN	124LG	A13
800VU	CABIN LIGHT POWER - LIGHT 1	4LG	B 1
800VU	CABIN LIGHT POWER - LIGHT 1	5LG	B 2
800VU	CABIN LIGHT POWER - LIGHT 1	6LG	B 3
800VU	CABIN LIGHT POWER - LIGHT 1	7LG	B 4
800VU	CABIN LIGHT POWER - LIGHT 1	8LG	B 5
800VU	CABIN LIGHT POWER - LIGHT 1	9LG	B 6

PANEL	SERVICE	IDENT.	LOCATION
800VU	CABIN LIGHT POWER - LIGHT 2	10LG	B 8
800VU	CABIN LIGHT POWER - LIGHT 2	14LG	B10
800VU	CABIN LIGHT POWER - LIGHT 2	18LG	B11
800VU	CABIN LIGHT POWER - LIGHT 2	22LG	B13

**ON A/C 001-100,

(d)Open, safety and tag the following circuit breaker:

PANEL	SERVICE	IDENT.	LOCATION
133VU	ENGINES/OIL/ENG 1/LO PRESS	1ES	Q69

(e)Ensure flight compartment door is closed.

R **ON A/C 101-104,

(2)Test
(a)Test of First Class (FC) passenger compartment lighting

ACTION	RESULT
1. On panel 789VU: - press P/BSW '1'.	On panel 789VU: - indicator light in P/BSW '1' comes on.
2. On panel 789VU: - press P/BSW '2'.	On panel 789VU: - indicator light in P/BSW '2' comes on.
3. On panel 789VU: - press P/BSW '3'.	On panel 789VU: - indicator light in P/BSW '3' comes on.
4. On panel 789VU: - press P/BSW 'FC 100'.	On panel 789VU: - indicator light in P/BSW 'FC 100' comes on. FC passenger compartment: - light strips 1, 2 and 3, LH and RH, come on with full intensity (100 %).
5. On panel 789VU: - press P/BSW 'FC 50'.	On panel 789VU: - indicator light in P/BSW 'FC 100' goes off. - indicator light in P/BSW 'FC 50' comes on. FC passenger compartment: - fluorescent lamps, listed in (2) (a) 4., remain on with halved intensity (50 %).

ACTION	RESULT
6. On panel 789VU: - press P/BSW 'FC 10'.	On panel 789VU: - indicator light in P/BSW 'FC 50' goes off. - indicator light in P/BSW 'FC 10' comes on. FC passenger compartment: - fluorescent lamps, listed in (2) (a) 4., remain on with minimum intensity (10 %).
7. On panel 789VU: - press P/BSW 'FC 10' again.	- indicator light and fluorescent lamps, listed in (2) (a) 6., go off.
8. On panel 789VU: - press P/BSW '1'.	On panel 789VU: - indicator light in P/BSW '1' goes off.
9. On panel 789VU: - press P/BSW '2'.	On panel 789VU: - indicator light in P/BSW '2' goes off.
10. On panel 789VU: - press P/BSW '3'.	On panel 789VU: - indicator light in P/BSW '3' goes off.

**ON A/C 001-100,

(2)Test
(a)Test of First Class (FC) passenger compartment lighting

ACTION	RESULT
1. On panel 789VU: - press P/BSW '1'.	On panel 789VU: - indicator light in P/BSW '1' comes on.
2. On panel 789VU: - press P/BSW '2'.	On panel 789VU: - indicator light in P/BSW '2' comes on.
3. On panel 789VU: - press P/BSW '3'.	On panel 789VU: - indicator light in P/BSW '3' comes on.
4. On panel 789VU: - press P/BSW 'FC 100'.	On panel 789VU: - indicator light in P/BSW 'FC 100' comes on. FC passenger compartment: - light strips 1, 2 and 3, LH and RH, come on with full intensity (100 %). - light strip CTR HATRACK comes on with full intensity (100 %).

ACTION	RESULT
5. On panel 789VU: - press P/BSW 'FC 50'.	On panel 789VU: - indicator light in P/BSW 'FC 100' goes off. - indicator light in P/BSW 'FC 50' comes on. FC passenger compartment: - fluorescent lamps, listed in (2) (a) 4., remain on with halved intensity (50 %).
6. On panel 789VU: - press P/BSW 'FC 10'.	On panel 789VU: - indicator light in P/BSW 'FC 50' goes off. - indicator light in P/BSW 'FC 10' comes on. FC passenger compartment: - fluorescent lamps, listed in (2) (a) 4., remain on with minimum intensity (10 %).
7. On panel 789VU: - press P/BSW 'FC 10' again.	- indicator light and fluorescent lamps, listed in (2) (a) 6., go off.
8. On panel 789VU: - press P/BSW '1'.	On panel 789VU: - indicator light in P/BSW '1' goes off.
9. On panel 789VU: - press P/BSW '2'.	On panel 789VU: - indicator light in P/BSW '2' goes off.
10. On panel 789VU: - press P/BSW '3'.	On panel 789VU: - indicator light in P/BSW '3' goes off.

R **ON A/C 105-200,

(2)Test

R (a)Test of Business Class (BC), FWD section of passenger compartment lighting

ACTION	RESULT
1. On panel 789VU: - press P/BSW '1'.	On panel 789VU: - indicator light in P/BSW '1' comes on.
2. On panel 789VU: - press P/BSW '2'.	On panel 789VU: - indicator light in P/BSW '2' comes on.

	ACTION	RESULT
	3. On panel 789VU: - press P/BSW '3'.	On panel 789VU: - indicator light in P/BSW '3' comes on.
	4. On panel 789VU: - press P/BSW 'BC 100'.	On panel 789VU: - indicator light in P/BSW 'BC 100' comes on.
R		FWD section of passenger compartment: - light strips 1, 2 and 3, LH and RH, come on with full intensity (100 %).
	5. On panel 789VU: - press P/BSW 'BC 50'.	On panel 789VU: - indicator light in P/BSW 'BC 100' goes off.
R		- indicator light in P/BSW 'BC 50' comes on.
R		FWD section of passenger compartment: - fluorescent lamps, listed in (2) (a) 4., remain on with halved intensity (50 %).
	6. On panel 789VU: - press P/BSW 'BC 10'.	On panel 789VU: - indicator light in P/BSW 'BC 50' goes off.
R		- indicator light in P/BSW 'BC 10' comes on.
R		FWD section of passenger compartment: - fluorescent lamps, listed in (2) (a) 4., remain on with minimum intensity (10 %).
	7. On panel 789VU: - press P/BSW 'BC 10' again.	- indicator light and fluorescent lamps, listed in (2) (a) 6., go off.
	8. On panel 789VU: - press P/BSW '1'.	On panel 789VU: - indicator light in P/BSW '1' goes off.
	9. On panel 789VU: - press P/BSW '2'.	On panel 789VU: - indicator light in P/BSW '2' goes off.
	10. On panel 789VU: - press P/BSW '3'.	On panel 789VU: - indicator light in P/BSW '3' goes off.

R **ON A/C 101-104,

(b)Test of Business Class (BC) passenger compartment lighting

ACTION	RESULT
1. On panel 789VU: - press P/BSW '1'.	On panel 789VU: - indicator light in P/BSW '1' comes on.
2. On panel 789VU: - press P/BSW '2'.	On panel 789VU: - indicator light in P/BSW '2' comes on.
3. On panel 789VU: - press P/BSW '3'.	On panel 789VU: - indicator light in P/BSW '3' comes on.
4. On panel 789VU: - press P/BSW 'BC 100'.	On panel 789VU: - indicator light in P/BSW 'BC 100' comes on. On panel 753VU: - indicator light in P/BSW 'BC 100' comes on. BC passenger compartment: - light strips 1, 2 and 3, LH and RH, come on with full intensity (100 %). - light strip CTR HATRACK comes on with full intensity (100 %).
5. On panel 789VU: - press P/BSW 'BC 50'.	On panel 789VU: - indicator light in P/BSW 'BC 100' goes off. - indicator light in P/BSW 'BC 50' comes on. On panel 753VU: - indicator light in P/BSW 'BC 100' goes off. - indicator light in P/BSW 'BC 50' comes on. BC passenger compartment: - fluorescent lamps, listed in (2) (b) 4., remain on with halved intensity (50 %).
6. On panel 789VU: - press P/BSW 'BC 10'.	On panel 789VU: - indicator light in P/BSW 'BC 50' goes off. - indicator light in P/BSW 'BC 10' comes on. On panel 753VU: - indicator light in P/BSW 'BC 50' goes off. - indicator light in P/BSW 'BC 10'

ACTION	RESULT
	comes on. BC passenger compartment: - fluorescent lamps, listed in (2) (b) 4., remain on with minimum intensity (10 %).
7. On panel 789VU: - press P/BSW 'BC 10' again.	- indicator lights and fluorescent lamps, listed in (2) (b) 6., go off.
8. On panel 753VU: - press P/BSW 'BC 100'.	On panel 753VU: - indicator light in P/BSW 'BC 100' comes on. On panel 789VU: - indicator light in P/BSW 'BC 100' comes on. BC passenger compartment: - fluorescent lamps, listed in (2) (b) 4., come on with full intensity (100 %).
9. On panel 753VU: - press P/BSW 'BC 50'.	On panel 753VU: - indicator light in P/BSW 'BC 100' goes off. - indicator light in P/BSW 'BC 50' comes on. On panel 789VU: - indicator light in P/BSW 'BC 100' goes off. - indicator light in P/BSW 'BC 50' comes on. BC passenger compartment: - fluorescent lamps, listed in (2) (b) 4., remain on with halved intensity (50 %).
10. On panel 753VU: - press P/BSW 'BC 10'.	On panel 753VU: - indicator light in P/BSW 'BC 50' goes off. - indicator light in P/BSW 'BC 10' comes on. On panel 789VU: - indicator light in P/BSW 'BC 50' goes off. - indicator light in P/BSW 'BC 10' comes on. BC passenger compartment: - fluorescent lamps, listed in (2) (b) 4., remain on with minimum intensity (10 %).
11. On panel 753VU: - press P/BSW 'BC 10' again.	- indicator lights and fluorescent

ACTION	RESULT
	lamps, listed in (2) (b) 10., go off.
12. On panel 789VU: - press P/BSW '1'.	On panel 789VU: - indicator light in P/BSW '1' goes off.
13. On panel 789VU: - press P/BSW '2'.	On panel 789VU: - indicator light in P/BSW '2' goes off.
14. On panel 789VU: - press P/BSW '3'.	On panel 789VU: - indicator light in P/BSW '3' goes off.

**ON A/C 001-100,

(b)Test of Economy Class Forward (YCF) passenger compartment lighting

ACTION	RESULT
1. On panel 789VU: - press P/BSW '1'.	On panel 789VU: - indicator light in P/BSW '1' comes on.
2. On panel 789VU: - press P/BSW '2'.	On panel 789VU: - indicator light in P/BSW '2' comes on.
3. On panel 789VU: - press P/BSW '3'.	On panel 789VU: - indicator light in P/BSW '3' comes on.
4. On panel 789VU: - press P/BSW 'YCF 100'.	On panel 789VU: - indicator light in P/BSW 'YCF 100' comes on. On panel 1318VU: - indicator light in P/BSW 'YCF 100' comes on. YCF passenger compartment: - light strips 1, 2 and 3, LH and RH, come on with full intensity (100 %). - light strip CTR HATRACK comes on with full intensity (100 %).
5. On panel 789VU: - press P/BSW 'YCF 50'.	On panel 789VU: - indicator light in P/BSW 'YCF 100' goes off. - indicator light in P/BSW 'YCF 50' comes on. On panel 1318VU: - indicator light in P/BSW 'YCF 100' goes off. - indicator light in P/BSW 'YCF 50'

ACTION	RESULT
	comes on. YCF passenger compartment: - fluorescent lamps, listed in (2) (b) 4., remain on with halved intensity (50 %).
6. On panel 789VU: - press P/BSW 'YCF 10'.	On panel 789VU: - indicator light in P/BSW 'YCF 50' goes off. - indicator light in P/BSW 'YCF 10' comes on. On panel 1318VU: - indicator light in P/BSW 'YCF 50' goes off. - indicator light in P/BSW 'YCF 10' comes on. YCF passenger compartment: - fluorescent lamps, listed in (2) (b) 4., remain on with minimum intensity (10 %).
7. On panel 789VU: - press P/BSW 'YCF 10' again.	- indicator lights and fluorescent lamps, listed in (2) (b) 6., go off.
8. On panel 1318VU: - press P/BSW 'YCF 100'.	On panel 1318VU: - indicator light in P/BSW 'YCF 100' comes on. On panel 789VU: - indicator light in P/BSW 'YCF 100' comes on. YCF passenger compartment: - fluorescent lamps, listed in (2) (b) 4., come on with full intensity (100 %).
9. On panel 1318VU: - press P/BSW 'YCF 50'.	On panel 1318VU: - indicator light in P/BSW 'YCF 100' goes off. - indicator light in P/BSW 'YCF 50' comes on. On panel 789VU: - indicator light in P/BSW 'YCF 100' goes off. - indicator light in P/BSW 'YCF 50' comes on. YCF passenger compartment: - fluorescent lamps, listed in (2) (b) 4., remain on with halved intensity (50 %).
10. On panel 1318VU: - press P/BSW 'YCF 10'.	On panel 1318VU: - indicator light in P/BSW 'YCF 50'

ACTION	RESULT
	goes off. - indicator light in P/BSW 'YCF 10' comes on. On panel 789VU: - indicator light in P/BSW 'YCF 50' goes off. - indicator light in P/BSW 'YCF 10' comes on. YCF passenger compartment: - fluorescent lamps, listed in (2) (b) 4., remain on with minimum intensity (10 %).
11. On panel 1318VU: - press P/BSW 'YCF 10' again.	- indicator lights and fluorescent lamps, listed in (2) (b) 10., go off.
12. On panel 789VU: - press P/BSW '1'.	On panel 789VU: - indicator light in P/BSW '1' goes off.
13. On panel 789VU: - press P/BSW '2'.	On panel 789VU: - indicator light in P/BSW '2' goes off.
14. On panel 789VU: - press P/BSW '3'.	On panel 789VU: - indicator light in P/BSW '3' goes off.

R **ON A/C 105-200,

R (b)Test of Economy Class (YC), MID section of passenger compartment
R lighting

ACTION	RESULT
1. On panel 789VU: - press P/BSW '1'.	On panel 789VU: - indicator light in P/BSW '1' comes on.
2. On panel 789VU: - press P/BSW '2'.	On panel 789VU: - indicator light in P/BSW '2' comes on.
3. On panel 789VU: - press P/BSW '3'.	On panel 789VU: - indicator light in P/BSW '3' comes on.
4. On panel 789VU: R - press P/BSW 'M 100'.	On panel 789VU: - indicator light in P/BSW 'M 100' comes on.

	ACTION	RESULT
		On panel 753VU: - indicator light in P/BSW 'M 100' comes on.
R		MID section of passenger compartment: - light strips 1, 2 and 3, LH and RH, come on with full intensity (100 %). - light strip CTR HATRACK comes on with full intensity (100 %).
	5. On panel 789VU:	On panel 789VU:
R	- press P/BSW 'M 50'.	- indicator light in P/BSW 'M 100' goes off. - indicator light in P/BSW 'M 50' comes on. On panel 753VU: - indicator light in P/BSW 'M 100' goes off. - indicator light in P/BSW 'M 50' comes on.
R		MID section of passenger compartment: - fluorescent lamps, listed in (2) (b) 4., remain on with halved intensity (50 %).
	6. On panel 789VU:	On panel 789VU:
R	- press P/BSW 'M 10'.	- indicator light in P/BSW 'M 50' goes off.
R		- indicator light in P/BSW 'M 10' comes on. On panel 753VU:
R		- indicator light in P/BSW 'M 50' goes off.
R		- indicator light in P/BSW 'M 10' comes on.
R		MID section of passenger compartment: - fluorescent lamps, listed in (2) (b) 4., remain on with minimum intensity (10 %).
	7. On panel 789VU:	
R	- press P/BSW 'M 10' again.	- indicator lights and fluorescent lamps, listed in (2) (b) 6., go off.
	8. On panel 753VU:	On panel 753VU:
R	- press P/BSW 'M 100'.	- indicator light in P/BSW 'M 100' comes on. On panel 789VU:

	ACTION	RESULT
R		- indicator light in P/BSW 'M 100' comes on.
R		MID section of passenger compartment: - fluorescent lamps, listed in (2) (b) 4., come on with full intensity (100 %).
	9. On panel 753VU:	On panel 753VU:
R	- press P/BSW 'M 50'.	- indicator light in P/BSW 'M 100' goes off.
R		- indicator light in P/BSW 'M 50' comes on.
		On panel 789VU:
R		- indicator light in P/BSW 'M 100' goes off.
R		- indicator light in P/BSW 'M 50' comes on.
R		MID section of passenger compartment: - fluorescent lamps, listed in (2) (b) 4., remain on with halved intensity (50 %).
	10. On panel 753VU:	On panel 753VU:
R	- press P/BSW 'M 10'.	- indicator light in P/BSW 'M 50' goes off.
R		- indicator light in P/BSW 'M 10' comes on.
		On panel 789VU:
R		- indicator light in P/BSW 'M 50' goes off.
R		- indicator light in P/BSW 'M 10' comes on.
R		MID section of passenger compartment: - fluorescent lamps, listed in (2) (b) 4., remain on with minimum intensity (10 %).
	11. On panel 753VU:	
R	- press P/BSW 'M 10' again.	- indicator lights and fluorescent lamps, listed in (2) (b) 10., go off.
	12. On panel 789VU: - press P/BSW '1'.	On panel 789VU: - indicator light in P/BSW '1' goes off.
	13. On panel 789VU: - press P/BSW '2'.	On panel 789VU: - indicator light in P/BSW '2' goes off.

ACTION	RESULT
14. On panel 789VU: - press P/BSW '3'.	On panel 789VU: - indicator light in P/BSW '3' goes off.

R **ON A/C 001-100,

(c)Test of Economy Class Rear (YCR) passenger compartment lighting

ACTION	RESULT
1. On panel 789VU: - press P/BSW '1'.	On panel 789VU: - indicator light in P/BSW '1' comes on.
2. On panel 789VU: - press P/BSW '2'.	On panel 789VU: - indicator light in P/BSW '2' comes on.
3. On panel 789VU: - press P/BSW '3'.	On panel 789VU: - indicator light in P/BSW '3' comes on.
4. On panel 789VU: - press P/BSW 'YCR 100'.	On panel 789VU: - indicator light in P/BSW 'YCR 100' comes on. On panel 752VU: - indicator light in P/BSW 'YCR 100' comes on. At AFT entrance area - panel 840VU, 841VU, 842VU and 843VU: - two fluorescent lamps, in each panel, come on with full intensity (100 %). At AFT entrance area - panel 846VU and 847VU: - one fluorescent lamp, in each panel, come on with full intensity (100 %). YCR passenger compartment: - light strips 1, 2 and 3, LH and RH, come on with full intensity (100 %). - light strip CTR HATRACK comes on with full intensity (100 %).
5. On panel 789VU: - press P/BSW 'YCR 50'.	On panel 789VU: - indicator light in P/BSW 'YCR 100' goes off. - indicator light in P/BSW 'YCR 50' comes on. On panel 752VU: - indicator light in P/BSW 'YCR 100'

ACTION	RESULT
	goes off. - indicator light in P/BSW 'YCR 50' comes on. At AFT entrance area and YCR passenger compartment: - fluorescent lamps, listed in (2) (c) 4., remain on with halved intensity (50 %).
6. On panel 789VU: - press P/BSW 'YCR 10'.	On panel 789VU: - indicator light in P/BSW 'YCR 50' goes off. - indicator light in P/BSW 'YCR 10' comes on. On panel 752VU: - indicator light in P/BSW 'YCR 50' goes off. - indicator light in P/BSW 'YCR 10' comes on. At AFT entrance area and YCR passenger compartment: - fluorescent lamps, listed in (2) (c) 4., remain on with minimum intensity (10 %).
7. On panel 789VU: - press P/BSW 'YCR 10' again.	- indicator lights and fluorescent lamps, listed in (2) (c) 6., go off.
8. On panel 752VU: - press P/BSW 'YCR 100'.	On panel 752VU: - indicator light in P/BSW 'YCR 100' comes on. On panel 789VU: - indicator light in P/BSW 'YCR 100' comes on. At AFT entrance area and YCR passenger compartment: - fluorescent lamps, listed in (2) (c) 4., come on with full intensity (100 %).
9. On panel 752VU: - press P/BSW 'YCR 50'.	On panel 752VU: - indicator light in P/BSW 'YCR 100' goes off. - indicator light in P/BSW 'YCR 50' comes on. On panel 789VU: - indicator light in P/BSW 'YCR 100' goes off. - indicator light in P/BSW 'YCR 50' comes on. At AFT entrance area and YCR

ACTION	RESULT
	passenger compartment: - fluorescent lamps, listed in (2) (c) 4., remain on with halved intensity (50 %).
10. On panel 752VU: - press P/BSW 'YCR 10'.	On panel 752VU: - indicator light in P/BSW 'YCR 50' goes off. - indicator light in P/BSW 'YCR 10' comes on. On panel 789VU: - indicator light in P/BSW 'YCR 50' goes off. - indicator light in P/BSW 'YCR 10' comes on. At AFT entrance area and YCR passenger compartment: - fluorescent lamps, listed in (2) (c) 4., remain on with minimum intensity (10 %).
11. On panel 752VU: - press P/BSW 'YCR 10' again.	- indicator lights and fluorescent lamps, listed in (2) (c) 10., go off.
12. On panel 789VU: - press P/BSW '1'.	On panel 789VU: - indicator light in P/BSW '1' goes off.
13. On panel 789VU: - press P/BSW '2'.	On panel 789VU: - indicator light in P/BSW '2' goes off.
14. On panel 789VU: - press P/BSW '3'.	On panel 789VU: - indicator light in P/BSW '3' goes off.

R **ON A/C 101-104,

(c)Test of Economy Class (YC) passenger compartment lighting

ACTION	RESULT
1. On panel 789VU: - press P/BSW '1'.	On panel 789VU: - indicator light in P/BSW '1' comes on.
2. On panel 789VU: - press P/BSW '2'.	On panel 789VU: - indicator light in P/BSW '2' comes on.
3. On panel 789VU: - press P/BSW '3'.	On panel 789VU: - indicator light in P/BSW '3' comes on.

ACTION	RESULT
4. On panel 789VU: - press P/BSW 'YC 100'.	On panel 789VU: - indicator light in P/BSW 'YC 100' comes on. On panel 866VU: - indicator light in P/BSW 'YC 100' comes on. At AFT entrance area - panel 840VU, 841VU, 1944VU and 1945VU: - two fluorescent lamps, in each panel, come on with full intensity (100 %). At AFT entrance area - panel 842VU and 843VU: - three fluorescent lamps, in each panel, come on with full intensity (100 %). YC passenger compartment: - light strips 1, 2 and 3, LH and RH, come on with full intensity (100 %). - light strip CTR HATRACK comes on with full intensity (100 %).
5. On panel 789VU: - press P/BSW 'YC 50'.	On panel 789VU: - indicator light in P/BSW 'YC 100' goes off. - indicator light in P/BSW 'YC 50' comes on. On panel 866VU: - indicator light in P/BSW 'YC 100' goes off. - indicator light in P/BSW 'YC 50' comes on. At AFT entrance area and YC passenger compartment: - fluorescent lamps, listed in (2) (c) 4., remain on with halved intensity (50 %).
6. On panel 789VU: - press P/BSW 'YC 10'.	On panel 789VU: - indicator light in P/BSW 'YC 50' goes off. - indicator light in P/BSW 'YC 10' comes on. On panel 866VU: - indicator light in P/BSW 'YC 50' goes off. - indicator light in P/BSW 'YC 10' comes on. At AFT entrance area and YC passenger compartment:

ACTION	RESULT
	- fluorescent lamps, listed in (2) (c) 4., remain on with minimum intensity (10 %).
7. On panel 789VU: - press P/BSW 'YC 10' again.	- indicator lights and fluorescent lamps, listed in (2) (c) 6., go off.
8. On panel 866VU: - press P/BSW 'YC 100'.	On panel 866VU: - indicator light in P/BSW 'YC 100' comes on. On panel 789VU: - indicator light in P/BSW 'YC 100' comes on. At AFT entrance area and YC passenger compartment: - fluorescent lamps, listed in (2) (c) 4., come on with full intensity (100 %).
9. On panel 866VU: - press P/BSW 'YC 50'.	On panel 866VU: - indicator light in P/BSW 'YC 100' goes off. - indicator light in P/BSW 'YC 50' comes on. On panel 789VU: - indicator light in P/BSW 'YC 100' goes off. - indicator light in P/BSW 'YC 50' comes on. At AFT entrance area and YC passenger compartment: - fluorescent lamps, listed in (2) (c) 4., remain on with halved intensity (50 %).
10. On panel 866VU: - press P/BSW 'YC 10'.	On panel 866VU: - indicator light in P/BSW 'YC 50' goes off. - indicator light in P/BSW 'YC 10' comes on. On panel 789VU: - indicator light in P/BSW 'YC 50' goes off. - indicator light in P/BSW 'YC 10' comes on. At AFT entrance area and YC passenger compartment: - fluorescent lamps, listed in (2) (c) 4., remain on with minimum intensity (10 %).
11. On panel 866VU:	

ACTION	RESULT
- press P/BSW 'YC 10' again.	- indicator lights and fluorescent lamps, listed in (2) (c) 10., go off.
12. On panel 789VU: - press P/BSW '1'.	On panel 789VU: - indicator light in P/BSW '1' goes off.
13. On panel 789VU: - press P/BSW '2'.	On panel 789VU: - indicator light in P/BSW '2' goes off.
14. On panel 789VU: - press P/BSW '3'.	On panel 789VU: - indicator light in P/BSW '3' goes off.

R **ON A/C 105-200,

R (c)Test of Economy Class (YC), AFT section of passenger compartment lighting

R ACTION	RESULT
R 1. On panel 789VU: R - press P/BSW '1'.	On panel 789VU: - indicator light in P/BSW '1' comes on.
R 2. On panel 789VU: R - press P/BSW '2'.	On panel 789VU: - indicator light in P/BSW '2' comes on.
R 3. On panel 789VU: R - press P/BSW '3'.	On panel 789VU: - indicator light in P/BSW '3' comes on.
R 4. On panel 789VU: R - press P/BSW 'YC 100'.	On panel 789VU: - indicator light in P/BSW 'YC 100' comes on. On panel 866VU: - indicator light in P/BSW 'YC 100' comes on. At AFT entrance area - panel 840VU, 841VU, 1944VU and 1945VU: - two fluorescent lamps, in each panel, come on with full intensity (100 %). At AFT entrance area - panel 842VU and 843VU: - three fluorescent lamps, in each panel, come on with full intensity (100 %).

ACTION	RESULT
	AFT section of passenger compartment: - light strips 1, 2 and 3, LH and RH, come on with full intensity (100 %). - light strip CTR HATRACK comes on with full intensity (100 %).
5. On panel 789VU: - press P/BSW 'YC 50'.	On panel 789VU: - indicator light in P/BSW 'YC 100' goes off. - indicator light in P/BSW 'YC 50' comes on. On panel 866VU: - indicator light in P/BSW 'YC 100' goes off. - indicator light in P/BSW 'YC 50' comes on. At AFT entrance area and AFT section of passenger compartment: - fluorescent lamps, listed in (2) (c) 4., remain on with halved intensity (50 %).
6. On panel 789VU: - press P/BSW 'YC 10'.	On panel 789VU: - indicator light in P/BSW 'YC 50' goes off. - indicator light in P/BSW 'YC 10' comes on. On panel 866VU: - indicator light in P/BSW 'YC 50' goes off. - indicator light in P/BSW 'YC 10' comes on. At AFT entrance area and AFT section of passenger compartment: - fluorescent lamps, listed in (2) (c) 4., remain on with minimum intensity (10 %).
7. On panel 789VU: - press P/BSW 'YC 10' again.	- indicator lights and fluorescent lamps, listed in (2) (c) 6., go off.
8. On panel 866VU: - press P/BSW 'YC 100'.	On panel 866VU: - indicator light in P/BSW 'YC 100' comes on. On panel 789VU: - indicator light in P/BSW 'YC 100'

ACTION	RESULT
	comes on. At AFT entrance area and AFT section of passenger compartment: - fluorescent lamps, listed in (2) (c) 4., come on with full intensity (100 %).
9. On panel 866VU: - press P/BSW 'YC 50'.	On panel 866VU: - indicator light in P/BSW 'YC 100' goes off. - indicator light in P/BSW 'YC 50' comes on. On panel 789VU: - indicator light in P/BSW 'YC 100' goes off. - indicator light in P/BSW 'YC 50' comes on. At AFT entrance area and AFT section of passenger compartment: - fluorescent lamps, listed in (2) (c) 4., remain on with halved intensity (50 %).
10. On panel 866VU: - press P/BSW 'YC 10'.	On panel 866VU: - indicator light in P/BSW 'YC 50' goes off. - indicator light in P/BSW 'YC 10' comes on. On panel 789VU: - indicator light in P/BSW 'YC 50' goes off. - indicator light in P/BSW 'YC 10' comes on. At AFT entrance area and AFT section of passenger compartment: - fluorescent lamps, listed in (2) (c) 4., remain on with minimum intensity (10 %).
11. On panel 866VU: - press P/BSW 'YC 10' again.	- indicator lights and fluorescent lamps, listed in (2) (c) 10., go off.
12. On panel 789VU: - press P/BSW '1'.	On panel 789VU: - indicator light in P/BSW '1' goes off.
13. On panel 789VU:	On panel 789VU:

ACTION	RESULT
- press P/BSW '2'.	- indicator light in P/BSW '2' goes off.
14. On panel 789VU: - press P/BSW '3'.	On panel 789VU: - indicator light in P/BSW '3' goes off.

**ON A/C 001-100,

(d)Test of entrance lighting

ACTION	RESULT
1. On panel 818VU: - press P/BSW 'ENTR'.	On panel 818VU: - indicator lights in P/BSW 'ENTR' and '100' come on. At FWD entrance area - panel 849VU and 850VU: - five fluorescent lamps, in each panel, come on with full intensity (100 %). In galley pelmet: - fluorescent lamps come on with full intensity (100 %). At AFT entrance area - panel 842VU, 843VU, 1944VU and 1945VU: - two fluorescent lamps, in each panel, come on with full intensity (100 %).
2. On panel 818VU: - press P/BSW '50'.	On panel 818VU: - indicator light in P/BSW '100' goes off. - indicator light in P/BSW '50' comes on. At FWD and AFT entrance areas and in galley pelmet: - fluorescent lamps, listed in (2) (d) 1., remain on with halved intensity (50 %).
3. On panel 818VU: - press P/BSW '10'.	On panel 818VU: - indicator light in P/BSW '50' goes off. - indicator light in P/BSW '10' comes on. At FWD and AFT entrance areas and in galley pelmet: - fluorescent lamps, listed in (2) (d) 1., remain on with minimum in-

ACTION	RESULT
	tensity (10 %).
4. On panel 818VU: - press P/BSW '100'.	On panel 818VU: - indicator light in P/BSW '10' goes off. - indicator light in P/BSW '100' comes on. At FWD and AFT entrance areas and in galley pelmet: - fluorescent lamps, listed in (2) (d) 1., return to full intensity (100 %).
5. Open flight compartment door.	At FWD entrance area LH - panel 849VU: - fluorescent lamps dim to minimum intensity (10 %).
6. On panel 133VU: - remove safety clips and tags, and close circuit breaker 1ES.	At FWD entrance area LH: - fluorescent lamps, listed in (2) (d) 5., return to full intensity (100 %).
7. On panel 818VU: - press P/BSW 'ENTR'.	On panel 818VU: - indicator lights in P/BSW 'ENTR' and '100' goes off. At FWD and AFT entrance areas and in galley pelmet: - fluorescent lamps, listed in (2) (d) 1., go off.

**ON A/C 101-200,

(d)Test of entrance lighting

ACTION	RESULT
1. On panel 818VU: - press P/BSW 'ENTR 1 100'.	On panel 818VU: - indicator light in P/BSW 'ENTR 1 100' come on. At FWD entrance area - panel 849VU and 850VU: - five fluorescent lamps, in each panel, come on with full intensity (100 %).
2. On panel 818VU: - press P/BSW 'ENTR 1 50'.	On panel 818VU: - indicator light in P/BSW 'ENTR 1 100' goes off. - indicator light in P/BSW 'ENTR 1 50' comes on. At FWD entrance area: - fluorescent lamps, listed in (2)

ACTION	RESULT
	(d) 1., remain on with halved intensity (50 %).
3. On panel 818VU: - press P/BSW 'ENTR 1 10'.	On panel 818VU: - indicator light in P/BSW 'ENTR 1 50' goes off. - indicator light in P/BSW 'ENTR 1 10' comes on. At FWD entrance area: - fluorescent lamps, listed in (2) (d) 1., remain on with minimum intensity (10 %).
4. On panel 818VU: - press P/BSW 'ENTR 1 10' again.	On panel 818VU: - indicator light in P/BSW 'ENTR 1 10' goes off. At FWD entrance area: - fluorescent lamps, listed in (2) (d) 1., go off.
5. On panel 818VU: - press P/BSW 'G 6/7 100'.	On panel 818VU: - indicator light in P/BSW 'G 6/7 100' comes on. On panel 866VU: - indicator light in P/BSW 'G 6/7 100' comes on. At AFT galley pelmet: - fluorescent lamps come on with full intensity (100 %).
6. On panel 818VU: - press P/BSW 'G 6/7 50'.	On panel 818VU: - indicator light in P/BSW 'G 6/7 100' goes off. - indicator light in P/BSW 'G 6/7 50' comes on. On panel 866VU: - indicator light in P/BSW 'G 6/7 100' goes off. - indicator light in P/BSW 'G 6/7 50' comes on. At AFT galley pelmet: - fluorescent lamps, listed in (2) (d) 5., remain on with halved intensity (50 %).
7. On panel 818VU: - press P/BSW 'G 6/7 10'.	On panel 818VU: - indicator light in P/BSW 'G 6/7 50' goes off. - indicator light in P/BSW 'G 6/7 10' comes on. On panel 866VU: - indicator light in P/BSW 'G 6/7 50' goes off. - indicator light in P/BSW 'G 6/7 10'

ACTION	RESULT
	comes on. At AFT galley pelmet: - fluorescent lamps, listed in (2) (d) 5., remain on with minimum intensity (10 %).
8. On panel 818VU: - press P/BSW 'G 6/7 10' again.	On panel 818VU: - indicator light in P/BSW 'G 6/7 10' goes off. On panel 866VU: - indicator light in P/BSW 'G 6/7 10' goes off. At AFT galley pelmet: - fluorescent lamps, listed in (2) (d) 5., go off.
9. On panel 866VU: - press P/BSW 'G 6/7 100'.	On panel 866VU: - indicator light in P/BSW 'G 6/7 100' comes on. On panel 818VU: - indicator light in P/BSW 'G 6/7 100' comes on. At AFT galley pelmet: - fluorescent lamps, listed in (2) (d) 5., come on with full intensity (100 %).
10. On panel 866VU: - press P/BSW 'G 6/7 50'.	On panel 866VU: - indicator light in P/BSW 'G 6/7 100' goes off. - indicator light in P/BSW 'G 6/7 50' comes on. On panel 818VU: - indicator light in P/BSW 'G 6/7 100' goes off. - indicator light in P/BSW 'G 6/7 50' comes on. At AFT galley pelmet: - fluorescent lamps, listed in (2) (d) 5., remain on with halved intensity (50 %).
11. On panel 866VU: - press P/BSW 'G 6/7 10'.	On panel 866VU: - indicator light in P/BSW 'G 6/7 50' goes off. - indicator light in P/BSW 'G 6/7 10' comes on. On panel 818VU: - indicator light in P/BSW 'G 6/7 50' goes off. - indicator light in P/BSW 'G 6/7 10' comes on. At AFT galley pelmet:

ACTION	RESULT
	- fluorescent lamps, listed in (2) (d) 5., remain on with minimum intensity (10 %).
12. On panel 866VU: - press P/BSW 'G 6/7 10' again.	- indicator lights and fluorescent lamps, listed in (2) (d) 5., go off.
13. On panel 1318VU: - press P/BSW 'G 2/3 100'.	On panel 1318VU: - indicator light in P/BSW 'G 2/3 100' comes on. At MID galley pelmet: - fluorescent lamps come on with full intensity (100 %).
14. On panel 1318VU: - press P/BSW 'G 2/3 50'.	On panel 1318VU: - indicator light in P/BSW 'G 2/3 100' goes off. - indicator light in P/BSW 'G 2/3 50' comes on. At MID galley pelmet: - fluorescent lamps, listed in (2) (d) 13., remain on with halved intensity (50 %).
15. On panel 1318VU: - press P/BSW 'G 2/3 10'.	On panel 818VU: - indicator light in P/BSW 'G 2/3 50' goes off. - indicator light in P/BSW 'G 2/3 10' comes on. At MID galley pelmet: - fluorescent lamps, listed in (2) (d) 13., remain on with minimum intensity (10 %).
16. On panel 1318VU: - press P/BSW 'G 2/3 10' again.	On panel 818VU: - indicator light in P/BSW 'G 2/3 10' goes off. At MID galley pelmet: - fluorescent lamps, listed in (2) (d) 13., go off.

**ON A/C ALL

(3)Close-Up
(a)De-energize aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).
(b)Make certain that the working area is clean and clear of tools and miscellaneous items of equipment.

COCKPIT DOOR LIMIT SWITCH - MAINTENANCE PRACTICES

WARNING : BEFORE POWER IS SUPPLIED TO THE AIRCRAFT, MAKE CERTAIN THAT THE ELECTRICAL CIRCUITS, UPON WHICH WORK IS IN PROGRESS, ARE ISOLATED.

1. Reason for the Job

A. Replacement of limit switch

B. Adjustment of limit switch

2. Equipment and Materials

ITEM	DESIGNATION
A.	Electrical Ground Power Unit - 3-Phase, 115/200 V, 400 Hz
Referenced Procedures - 24-41-00, P. Block 301	AC External Power Control

3. Procedure

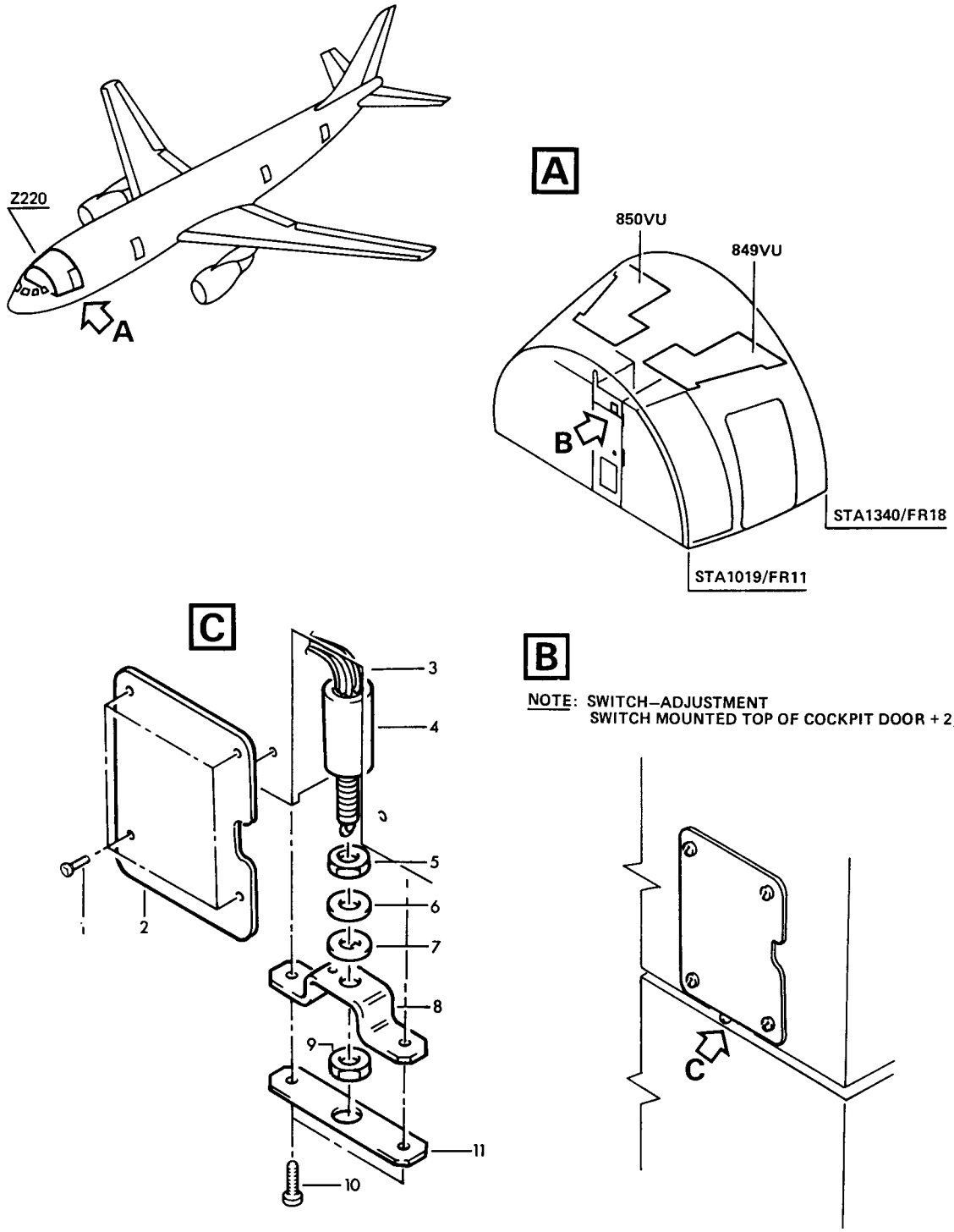
A. Job Set-Up
(1)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
133VU	ENGINES/OIL/ENG 1/LO PRESS	1ES	Q69
800VU	CABIN LIGHT CTL - ENTRY	21LG	A10

B. Removal (Ref. Fig. 201)
(1)Remove screws (1) and cover (2) from partition panel.
(2)Remove screws (10) with plate (11).
(3)Remove lockwire.
(4)Remove nut (9), plate (8), washer lock (7), washer (6) and nut (5) from switch (4).
(5)Disconnect electrical connectors (3).
(6)Remove switch (4).

C. Installation (Ref. Fig. 201)
(1)Connect electrical connectors (3).
(2)Install switch (4) with nut (5), washer (6), washer lock (7) and nut (9) on plate (8).
(3)Install plate (8) with plate (11) and screws (10).
(4)Secure nut (9) and (5) with lockwire 0.6 mm (0.024 in) dia.
(5)Install cover (2) with screws (1) on partition panel.
(Ref. Fig. 201)

D. Adjustment
(1)Remove screws (1) and cover (2) from partition panel.



Limit Switch
Figure 201

(2)Remove lockwire.
(3)Loosen nuts (5) and (9) from switch (4).
(4)Adjust switch (4) by moving nuts (5) and (9) for a 2.5mm course.
(5)Fasten nuts (5) and (9).
(6)Check if switch is in the right position.
(7)If not, repeat step 3 to 5.
(8)Secure nuts (9) and (5) with lockwire 0.6 mm (0.024 in) dia.
(9)Install cover (2) with screws (1) on partition panel.

E. Test
(1)Connect aircraft electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(2)Ensure flight compartment door is closed.
(3)Remove safety clips and tags and close circuit breaker 21LG.

ACTION	RESULT
1. On panel 818VU: - press P/BSW 'ENTR'.	At FWD entrance area: - fluorescent lamps come on with full intensity (100 %).
2. Open flight compartment door.	At FWD entrance area LH - panel 849VU: - fluorescent lamps dim to minimum intensity (10 %).
3. On panel 818VU: - press P/BSW 'ENTR'.	At FWD entrance area: - fluorescent lamps go off.

F. Close-Up
(1)Remove safety clip and tag and close circuit breaker 1ES.
(2)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(3)De-energize aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).

FLUORESCENT LAMP - SERVICING

1. Equipment and Materials

ITEM	DESIGNATION
A.	Stepladder, 2.0 m (6 ft. 6 in.)
B.	Circuit Breaker Safety Clips and Tags
C.	Lamp 115 V AC
D.	Electrical Ground Power Unit - 3-Phase, 115/200 V, 400 Hz

Referenced Procedures

- 24-41-00, P. Block 301	AC External Power Control
- 25-23-11, P. Block 401	Ceiling Panels
- 25-23-13, P. Block 401	Utility Area Ceiling Panels
- 25-23-63, P. Block 401	Fluorescent Lighting Cover
- 25-24-21, P. Block 401	Center Overhead Stowage Compartment

2. Procedure
(Ref. Fig. 301)

R **ON A/C 001-100,

A. Job Set-Up
(1)Open, safety and tag the following circuit breakers:

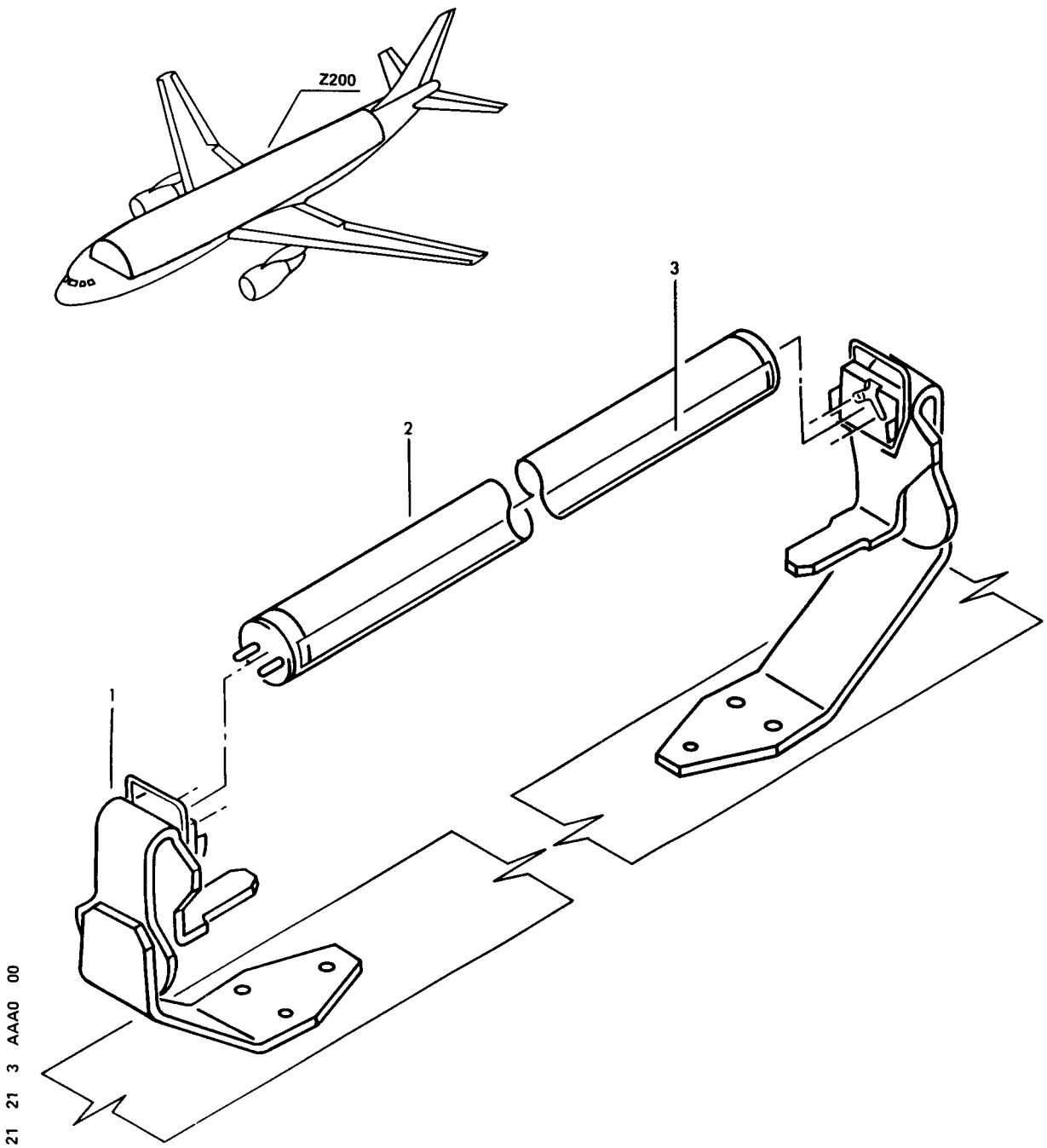
PANEL	SERVICE	IDENT.	LOCATION
800VU	CABIN LIGHT CONTR - ENTRY	21LG	A10
800VU	CABIN LIGHT CONTR - CABIN	702LG	A11
800VU	CABIN LIGHT CONTR - CABIN	119LG	A12
800VU	CABIN LIGHT CONTR - CABIN	124LG	A13

R **ON A/C 101-200,

A. Job Set-Up
(1)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
800VU	CABIN LIGHT CTL - ENTRY	21LG	A10
800VU	CABIN LIGHT CTL - CABIN	702LG	A11
800VU	CABIN LIGHT CTL - CABIN	119LG	A12
800VU	CABIN LIGHT CTL - CABIN	124LG	A13

R **ON A/C ALL



Fluorescent Lamp
Figure 301

(2)Position stepladder as required.
(3)To gain access to the fluorescent lamp installed in utility areas, remove relevant utility area ceiling panel cover (Ref. 25-23-13, P. Block 401).
(4)To gain access to the fluorescent lamp installed in cabin, remove relevant ceiling panels (Ref. 25-23-11, P. Block 401) and fluorescent light covers (Ref. 25-23-63, P. Block 401)
(5)To gain access to the fluorescent lamp installed in center overhead stowage compartments, remove relevant cover (Ref. 25-24-21, P. Block 401).
(6)To gain access to the fluorescent lamp installed in galley pelmets, remove pelmets.

B. Removal
(1)Release fluorescent lamp retaining clips (1).
(2)Remove fluorescent lamp (2).

C. Installation
NOTE : Some fluorescent lamps (2) have ionisation strips (3)installed. This depends of the vendor of the fluorescent lamp (2).
(1)If installed, note position of ionization strip (3) and install fluorescent lamp (2).
(2)Engage retaining clips (1).
(3)Install fluorescent lamp and secure retaining clips, if removed.

D. Test
NOTE : Control of fluorescent lamps are determined by their location. All circuit breakers and pushbutton selections are included in this test. To test a particular fluorescent lamp, it is only necessary to press the relevant P/BSW and ensure that the relevant AC circuit breaker is closed.
(1)Connect electrical ground power unit and energize aircraft electrical network (Ref. 24-41-00, P. Block 301).
(2)Remove safety clips and tags and close circuit breakers 21LG, 119LG, 124LG and 702LG.
(3)Make certain that the following circuit breakers are closed:

PANEL	SERVICE	IDENT.	LOCATION
800VU	CABIN LIGHT POWER - LIGHT 3	23LG	A 1
800VU	CABIN LIGHT POWER - LIGHT 3	25LG	A 3
800VU	CABIN LIGHT POWER - LIGHT 3	26LG	A 4
800VU	CABIN LIGHT POWER - LIGHT 3	28LG	A 6
800VU	CABIN LIGHT POWER - CTR HATRACK	960LG	A 7
800VU	CABIN LIGHT POWER - CTR HATRACK	961LG	A 8
800VU	CABIN LIGHT POWER - ENTRY	20LG	A 9
800VU	CABIN LIGHT POWER - LIGHT 1	4LG	B 1
800VU	CABIN LIGHT POWER - LIGHT 1	5LG	B 2
800VU	CABIN LIGHT POWER - LIGHT 1	6LG	B 3
800VU	CABIN LIGHT POWER - LIGHT 1	7LG	B 4
800VU	CABIN LIGHT POWER - LIGHT 1	8LG	B 5
800VU	CABIN LIGHT POWER - LIGHT 1	9LG	B 6
800VU	CABIN LIGHT POWER - LIGHT 2	10LG	B 8
800VU	CABIN LIGHT POWER - LIGHT 2	14LG	B10

PANEL	SERVICE	IDENT.	LOCATION
800VU	CABIN LIGHT POWER - LIGHT 2	18LG	B11
800VU	CABIN LIGHT POWER - LIGHT 2	22LG	B13

R **ON A/C 001-100,

(4)Test
(a)Test of Entrance Area Lighting.

ACTION	RESULT
On panel 818VU:	
1. Press P/BSW 'ENTR'.	- fluorescent lamps come on with 100 % intensity.
2. Press P/BSW '50'.	- fluorescent lamps remain on with 50 % intensity.
3. Press P/BSW '10'.	- fluorescent lamps remain on with 10 % intensity.
4. Press P/BSW 'ENTR'.	- fluorescent lamps go off.

R **ON A/C 101-200,

(4)Test
(a)Test of Entrance and Galley Area Lighting.

ACTION	RESULT
On panel 818VU:	In FWD entrance area:
1. Press P/BSW 'ENTR 1 100'.	- fluorescent lamps come on with 100 % intensity.
2. Press P/BSW 'ENTR 1 50'.	- fluorescent lamps remain on with 50 % intensity.
3. Press P/BSW 'ENTR 1 10'.	- fluorescent lamps remain on with 10 % intensity.
4. Press P/BSW 'ENTR 1 10' again.	- fluorescent lamps go off.
On panel 1318VU:	In MID galley area:
1. Press P/BSW 'G 2/3 100'.	- fluorescent lamps come on with 100 % intensity.
2. Press P/BSW 'G 2/3 50'.	- fluorescent lamps remain on with 50 % intensity.
3. Press P/BSW 'G 2/3 10'.	- fluorescent lamps remain on with 10 % intensity.
4. Press P/BSW 'G 2/3 10' again.	- fluorescent lamps go off.
On panel 818VU or 866VU:	In AFT galley area:
1. Press P/BSW 'G 6/7 100'.	- fluorescent lamps come on with 100 % intensity.

ACTION	RESULT
2. Press P/BSW 'G 6/7 50'.	- fluorescent lamps remain on with 50 % intensity.
3. Press P/BSW 'G 6/7 10'.	- fluorescent lamps remain on with 10 % intensity.
4. Press P/BSW 'G 6/7 10' again.	- fluorescent lamps go off.

R **ON A/C 001-100,

(b)Test of Passenger Compartment Lighting.
NOTE : Test of fluorescent lamps installed in First Class passenger compartment is described. For test of fluorescent lamps installed in Economy Class Forward or Economy Class Rear passenger compartment, refer to identification in brackets.

ACTION	RESULT
On panel 789VU:	On panel 789VU:
1. Press P/BSW '1','2' and '3'.	- indicator lights in P/BSW '1','2' and '3' come on.
	Passenger compartment:
2. Press P/BSW 'FC 100'. ('YCF 100','YCR 100')	- fluorescent lamps come on with 100 % intensity.
3. Press P/BSW 'FC 50'. ('YCF 50','YCR 50')	- fluorescent lamps remain on with 50 % intensity.
4. Press P/BSW 'FC 10'. ('YCF 10','YCR 10')	- fluorescent lamps remain on with 10 % intensity.
5. Press P/BSW 'FC 10' again. ('YCF 10','YCR 10')	- fluorescent lamps go off.
	On panel 789VU:
6. Press P/BSW '1','2' and '3'.	- indicator lights in P/BSW '1','2' and '3' go off.

R **ON A/C 101-200,

(b)Test of Passenger Compartment Lighting.
NOTE : Test of fluorescent lamps installed in First Class passenger compartment is described. For test of fluorescent lamps installed in Business or Economy Class passenger compartment, refer to identification in brackets.

ACTION	RESULT
On panel 789VU:	On panel 789VU:
1. Press P/BSW '1','2' and '3'.	- indicator lights in P/BSW '1','2' and '3' come on.
	Passenger compartment:
2. Press P/BSW 'FC 100'.	- fluorescent lamps come on with

ACTION	RESULT
('BC 100','YC 100')	100 % intensity.
3. Press P/BSW 'FC 50'. ('BC 50','YC 50')	- fluorescent lamps remain on with 50 % intensity.
4. Press P/BSW 'FC 10'. ('BC 10','YC 10')	- fluorescent lamps remain on with 10 % intensity.
5. Press P/BSW 'FC 10' again. ('BC 10','YC 10')	- fluorescent lamps go off.
6. Press P/BSW '1','2' and '3'.	On panel 789VU: - indicator lights in P/BSW '1','2' and '3' go off.

R **ON A/C ALL

E. Close-Up
(1)Install all covers and panels removed at Para. 2.A.
(2)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(3)Remove stepladder, if used.
(4)De-energize aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).

BALLAST UNIT - REMOVAL/INSTALLATION

NOTE : When the ballast unit has to be replaced, the fluorescent lamp must be replaced as well, otherwise the new ballast unit will fail again after a short period of operation.

1. Equipment and Materials

ITEM	DESIGNATION
A.	Stepladder, 2.0 m (6 ft. 6 in.)
B.	Electrical Ground Power Unit - 3-Phase, 115/200 V, 400 Hz

Referenced Procedures

- 24-41-00, P. Block 301	AC External Power Control
- 25-23-11, P. Block 401	Ceiling Panels
- 25-23-13, P. Block 401	Utility Area Ceiling Panels
- 25-23-63, P. Block 401	Fluorescent Lighting Cover
- 25-24-21, P. Block 401	Center Overhead Stowage Compartment

2. Procedure

**ON A/C 001-100,

(Ref. Fig. 401)

**ON A/C 101-200,

(Ref. Fig. 402)

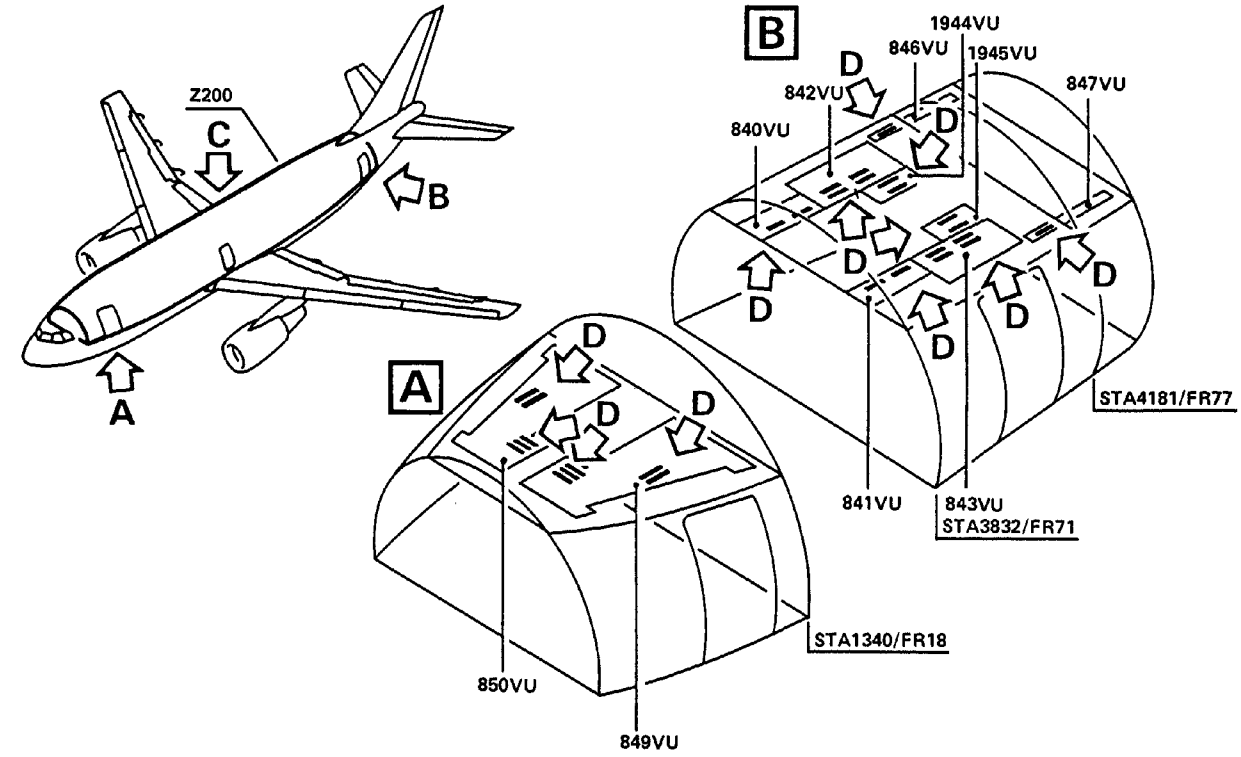
**ON A/C 001-100,

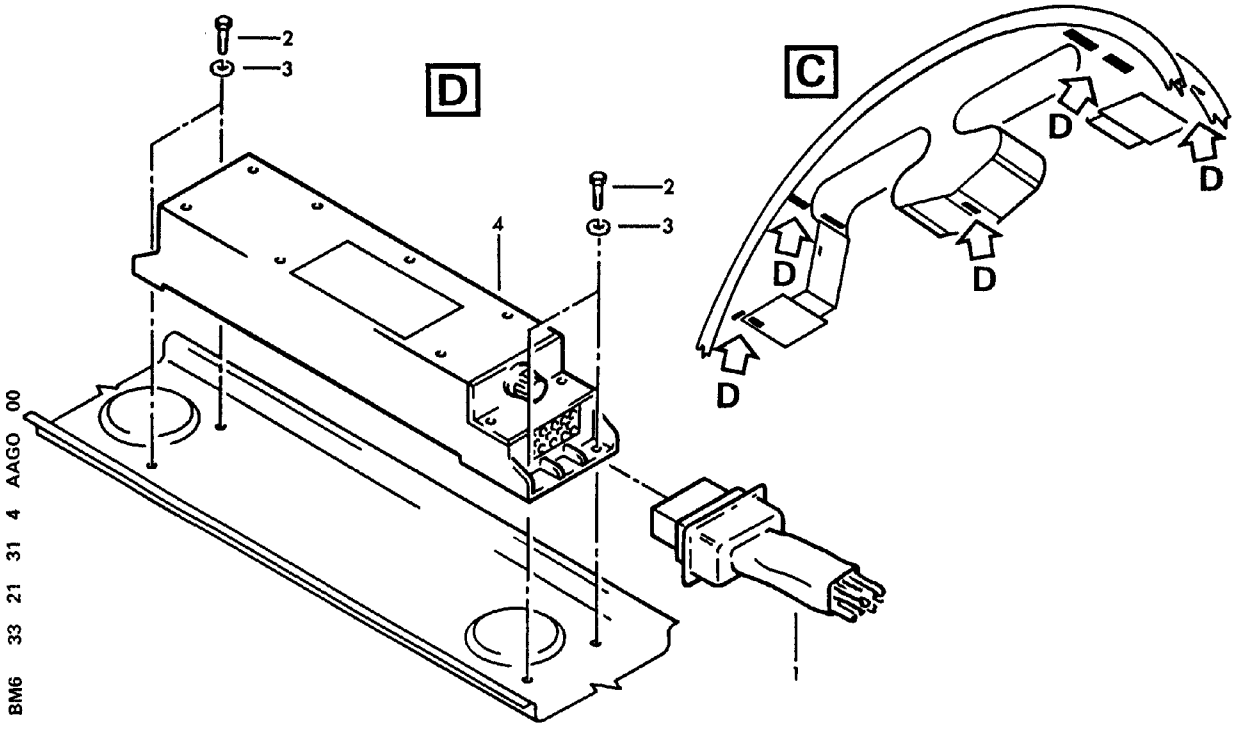
A. Job Set-Up
(1)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
800VU	CABIN LIGHT CONTR - ENTRY	21LG	A10
800VU	CABIN LIGHT CONTR - CABIN	702LG	A11
800VU	CABIN LIGHT CONTR - CABIN	119LG	A12
800VU	CABIN LIGHT CONTR - CABIN	124LG	A13

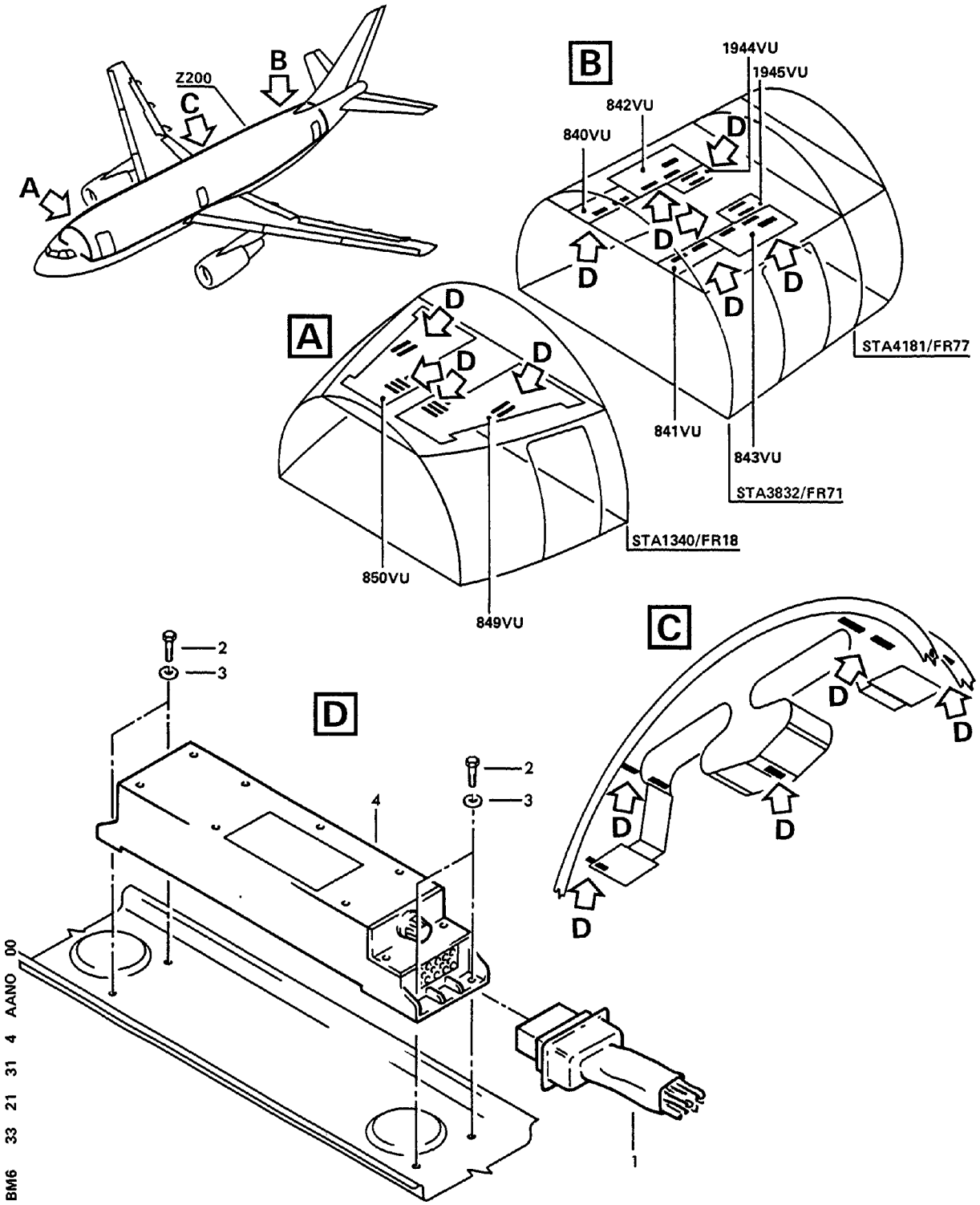
**ON A/C 101-200,

A. Job Set-Up
(1)Open, safety and tag the following circuit breakers:





Ballast Units
Figure 401



Ballast Units
Figure 402

PANEL	SERVICE	IDENT.	LOCATION
800VU	CABIN LIGHT CTL - ENTRY	21LG	A10
800VU	CABIN LIGHT CTL - CABIN	702LG	A11
800VU	CABIN LIGHT CTL - CABIN	119LG	A12
800VU	CABIN LIGHT CTL - CABIN	124LG	A13

**ON A/C ALL

(2)Position stepladder as required.
(3)To gain access to the ballast units installed in utility areas, remove relevant utility area ceiling panel cover (Ref. 25-23-13, P. Block 401).
(4)To gain access to the ballast units installed in cabin, remove relevant ceiling panel (Ref. 25-23-11, P. Block 401), fluorescent light covers (Ref. 25-23-63, P. Block 401)
(5)To gain access to the ballast units installed in center overhead stowage compartment, remove relevant cover (Ref. 25-24-21, P. Block 401).
(6)To gain access to the ballast units installed in galley pelmets, remove pelmets.
(7)Where the ballast unit is mounted beneath a fluorescent lamp, first release lamp retaining clips and then remove lamp.

B. Removal
(1)Disconnect electrical connector (1).
(2)Remove screws (2), washers (3) and ballast unit (4).
NOTE : When the ballast unit has to be replaced, the fluorescent lamp must be replaced as well, otherwise the new ballast unit will fail again after a short period of operation.

C. Installation
(1)Position ballast unit (4) and secure with screws (2) and washers (3).
(2)Connect electrical connector (1).
(3)Install fluorescent lamp and secure retaining clips, if removed.

D. Test
NOTE : Control of ballast units is determined by their location. All circuit breakers and pushbutton selections are included in this test. To test a particular ballast unit, it is only necessary to press the relevant P/BSW and ensure that the relevant AC circuit breaker is closed.
(1)Connect electrical ground power unit and energize aircraft electrical network (Ref. 24-41-00, P. Block 301).
(2)Remove safety clips and tags and close circuit breakers 21LG, 119LG, 124LG and 702LG.
(3)Make certain that the following circuit breakers are closed:

PANEL	SERVICE	IDENT.	LOCATION
800VU	CABIN LIGHT POWER - LIGHT 3	23LG	A 1
800VU	CABIN LIGHT POWER - LIGHT 3	25LG	A 3

PANEL	SERVICE	IDENT.	LOCATION
800VU	CABIN LIGHT POWER - LIGHT 3	26LG	A 4
800VU	CABIN LIGHT POWER - LIGHT 3	28LG	A 6
800VU	CABIN LIGHT POWER - CTR HATRACK	960LG	A 7
800VU	CABIN LIGHT POWER - CTR HATRACK	961LG	A 8
800VU	CABIN LIGHT POWER - ENTRY	20LG	A 9
800VU	CABIN LIGHT POWER - LIGHT 1	4LG	B 1
800VU	CABIN LIGHT POWER - LIGHT 1	5LG	B 2
800VU	CABIN LIGHT POWER - LIGHT 1	6LG	B 3
800VU	CABIN LIGHT POWER - LIGHT 1	7LG	B 4
800VU	CABIN LIGHT POWER - LIGHT 1	8LG	B 5
800VU	CABIN LIGHT POWER - LIGHT 1	9LG	B 6
800VU	CABIN LIGHT POWER - LIGHT 2	10LG	B 8
800VU	CABIN LIGHT POWER - LIGHT 2	14LG	B10
800VU	CABIN LIGHT POWER - LIGHT 2	18LG	B11
800VU	CABIN LIGHT POWER - LIGHT 2	22LG	B13

R **ON A/C 001-100,

(4)Test
(a)Test of Entrance Area Lighting Ballast Unit

ACTION	RESULT
On panel 818VU:	
1. Press P/BSW 'ENTR'.	- fluorescent lamp connected to relevant ballast unit comes on with 100 % intensity.
2. Press P/BSW '50'.	- fluorescent lamp remains on with 50 % intensity.
3. Press P/BSW '10'.	- fluorescent lamp remains on with 10 % intensity.
4. Press P/BSW 'ENTR'.	- fluorescent lamp goes off.

R **ON A/C 101-200,

(4)Test
(a)Test of Entrance and Galley Area Lighting Ballast Unit

ACTION	RESULT
On panel 818VU:	In FWD entrance area:
1. Press P/BSW 'ENTR 1 100'.	- fluorescent lamp connected to relevant ballast unit comes on with 100 % intensity.
2. Press P/BSW 'ENTR 1 50'.	- fluorescent lamp remains on with 50 % intensity.
3. Press P/BSW 'ENTR 1 10'.	- fluorescent lamp remains on with

ACTION	RESULT
	10 % intensity.
4. Press P/BSW 'ENTR 1 10 again'.	- fluorescent lamp goes off.
On panel 1318VU:	In MID galley area:
1. Press P/BSW 'G 2/3 100'.	- fluorescent lamp connected to relevant ballast unit comes on with 100 % intensity.
2. Press P/BSW 'G 2/3 50'.	- fluorescent lamp remains on with 50 % intensity.
3. Press P/BSW 'G 2/3 10'.	- fluorescent lamp remains on with 10 % intensity.
4. Press P/BSW 'G 2/3 100' again.	- fluorescent lamp goes off.
On panel 818VU or 866VU:	In AFT galley area:
1. Press P/BSW 'G 6/7 100'.	- fluorescent lamp connected to relevant ballast unit comes on with 100 % intensity.
R 2. Press P/BSW 'G 6/7 50'.	- fluorescent lamp remains on with 50 % intensity.
R 3. Press P/BSW 'G 6/7 10'.	- fluorescent lamp remains on with 10 % intensity.
R 4. Press P/BSW 'G 6/7 10' again.	- fluorescent lamp goes off.

R **ON A/C 001-100,

(b)Test of Passenger Compartment Lighting Ballast Unit

NOTE : Test of ballast unit installed in First Class passenger compartment is described. For test of ballast unit installed in Economy Class Forward or Economy Class Rear passenger compartment, refer to identification in brackets.

ACTION	RESULT
On panel 789VU:	On panel 789VU:
1. Press P/BSW '1','2' and '3'.	- indicator lights in P/BSW '1','2' and '3' come on.
	Passenger compartment:
2. Press P/BSW 'FC 100'. ('YCF 100','YCR 100')	- fluorescent lamp connected to relevant ballast unit comes on with 100 % intensity.
3. Press P/BSW 'FC 50'. ('YCF 50','YCR 50')	- fluorescent lamp remains on with 50 % intensity.
4. Press P/BSW 'FC 10'. ('YCF 10','YCR 10')	- fluorescent lamp remains on with 10 % intensity.
5. Press P/BSW 'FC 10' again. ('YCF 10','YCR 10')	- fluorescent lamp goes off.
	On panel 789VU:
6. Press P/BSW '1','2' and '3'.	- indicator lights in P/BSW '1','2'

ACTION	RESULT
	and '3' go off.

R **ON A/C 101-200,

(b)Test of Passenger Compartment Lighting Ballast Unit
NOTE : Test of ballast unit installed in First Class passenger compartment is described. For test of ballast unit installed in Business or Economy Class passenger compartment, refer to identification in brackets.

ACTION	RESULT
On panel 789VU:	On panel 789VU:
1. Press P/BSW '1','2' and '3'.	- indicator lights in P/BSW '1','2' and '3' come on.
	Passenger compartment:
2. Press P/BSW 'FC 100'. ('BC 100','YC 100')	- fluorescent lamp connected to relevant ballast unit comes on with 100 % intensity.
3. Press P/BSW 'FC 50'. ('BC 50','YC 50')	- fluorescent lamp remains on with 50 % intensity.
4. Press P/BSW 'FC 10'. ('BC 10','YC 10')	- fluorescent lamp remains on with 10 % intensity.
5. Press P/BSW 'FC 10' again. ('BC 10','YC 10')	- fluorescent lamp goes off.
	On panel 789VU:
6. Press P/BSW '1','2' and '3'.	- indicator lights in P/BSW '1','2' and '3' go off.

R **ON A/C ALL

E. Close-Up
(1)Install all covers and panels removed at Para. 2.A.
(2)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(3)Remove stepladder, if used.
(4)De-energize aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).

CALL SYSTEM - DESCRIPTION AND OPERATION

1. General

The call system is designed to provide the passengers with a convenient means of attracting the attention of a cabin attendant.
The system consists of individual passenger call buttons in overhead panels, area lights and lavatory call lights. A call button is installed in each lavatory. Each call button contains an integral light to locate the exact position of a passenger call. Audio annunciation through the passenger address (PA) system accompanies each passenger call.

2. Component Location

(Ref. Fig. 001)

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF.
2LN	LIGHT PANEL - AREA FWD		224		33-23-11
6LN	LIGHT PANEL - AREA MID		244		33-23-11
7LN	RELAY - TEST	800VU	223		
8LN	CALL BUTTON - LAVATORIES C, K, D, G	816VU	222/232/260		
9LN	P/BSW - CALL TEST	746VU	221		
10LN	CALL LIGHT - LAVATORY A		223		
11LN	LIGHT PANEL - AREA FWD		223		33-23-11
12LN	CALL LIGHT - LAVATORY E		264		
13LN	CALL LIGHT - LAVATORY D		263		
15LN	LIGHT PANEL - AREA MID		243		33-23-11
16LN	LIGHT PANEL - AREA AFT	840VU	254		33-23-11
17LN	CALL LIGHT - LAVATORY G		262		
18LN	DIODE MODULE		223		
19LN	CALL LIGHT - LAVATORY F		261		
20LN	DIODE MODULE		233		
21LN	CALL BUTTON - LAVATORIES A, H, E, F	817VU	221/231/260		
22LN	DIODE MODULE		253		
24LN	DIODE MODULE		253		
25LN	LIGHT PANEL - AREA AFT	841VU	253		33-23-11
28LN	DIODE	854VU	200		
35LN	DIODE	855VU	200		
47LN	CALL BUTTON - PASSENGER	855VU	200		
48LN	CALL BUTTON - PASSENGER	854VU	200		
78LN	CALL LIGHT - LAVATORY C		224		
79LN	CALL LIGHT - LAVATORY H		233		
80LN	CALL LIGHT - LAVATORY K		234		
116LN	DIODE	800VU	223		
117LN	DIODE	800VU	223		
118LN	DIODE	811VU	260		
119LN	DIODE	811VU	260		

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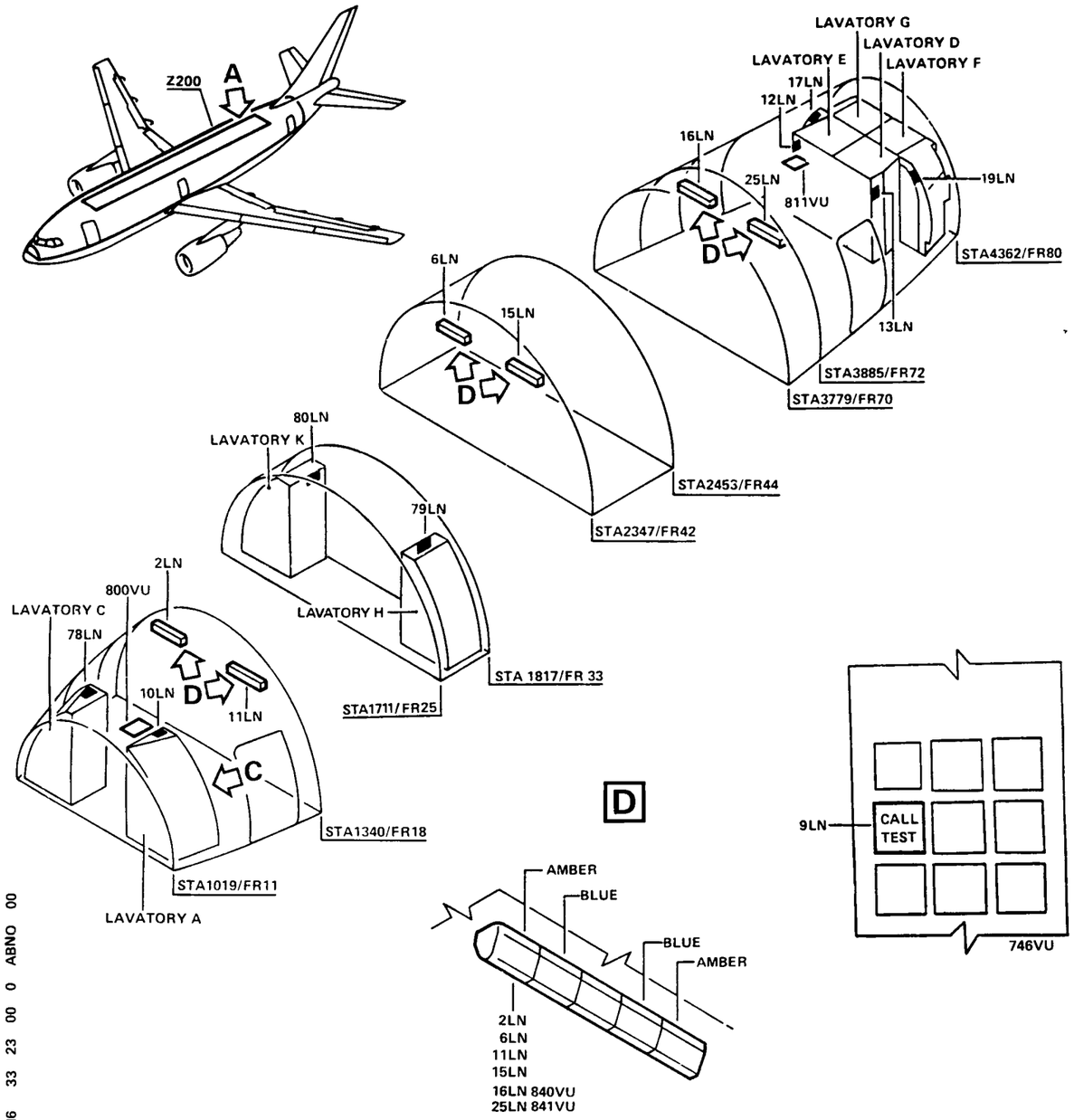

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Call System - Component Locations
Figure 001

3. Description

Power for the call system is supplied from the normal 28 V DC busbar. The call system consists of:

A. Passenger Call Buttons

(1) The call buttons are installed, within easy reach of each passenger, in the overhead panels. They are of the mechanically latching type and contain an indicator light.

(2) The lavatory call buttons are installed under the mirror. They are of the mechanically latching type and contain an indicator light.

(3) When the call button is pressed, it initiates an audio tone, switches on the appropriate area light and completes the circuit for the integral indicator light.

B. Area Lights

(1) Six area light panels are installed in the passenger compartment; two AFT of FWD entrance door LH and RH, two adjacent to emergency exit door LH and RH and two FWD of AFT entrance door LH and RH. Each area light comprises two blue and two amber lights.

(a) A blue light comes on whenever a passenger call is made. It indicates from which seat area the call originated. For example, the left blue light in the LH area light panel installed AFT of FWD entrance door comes on when a call is initiated from the left seat column in the first class compartment.
When a call is made from the economy class compartment, a blue light comes on in the respective area light panel installed adjacent to LH and RH emergency exit door and FWD of the AFT entrance door, indicating from which seat column the call is made.

(b) An amber light comes on whenever a call is made from a lavatory. It indicates from which lavatory the call originated. For example, if a call is made from the rear RH lavatory, the right amber light in the AFT area light panels come on. If a call is made from another lavatory, the amber light in the appropriate area light panels come on.

C. Call Lights

Yellow call lights are installed outside each lavatory. They come on when a call is made from a lavatory and indicate the lavatory from which the call is made.

D. Audio Annunciation

When a call is made, a 28 V DC supply is connected to the PA amplifier. The call system is so designed that, when a call is made, the Hi chime from the PA amplifier is heard over all loudspeakers.

E. Test Circuit

A test circuit, consisting of P/BSW 'CALL TEST' and a relay, enables a complete functional check of all lights, used in the call system to be carried out.

4. Operation (Ref. Fig. 002)

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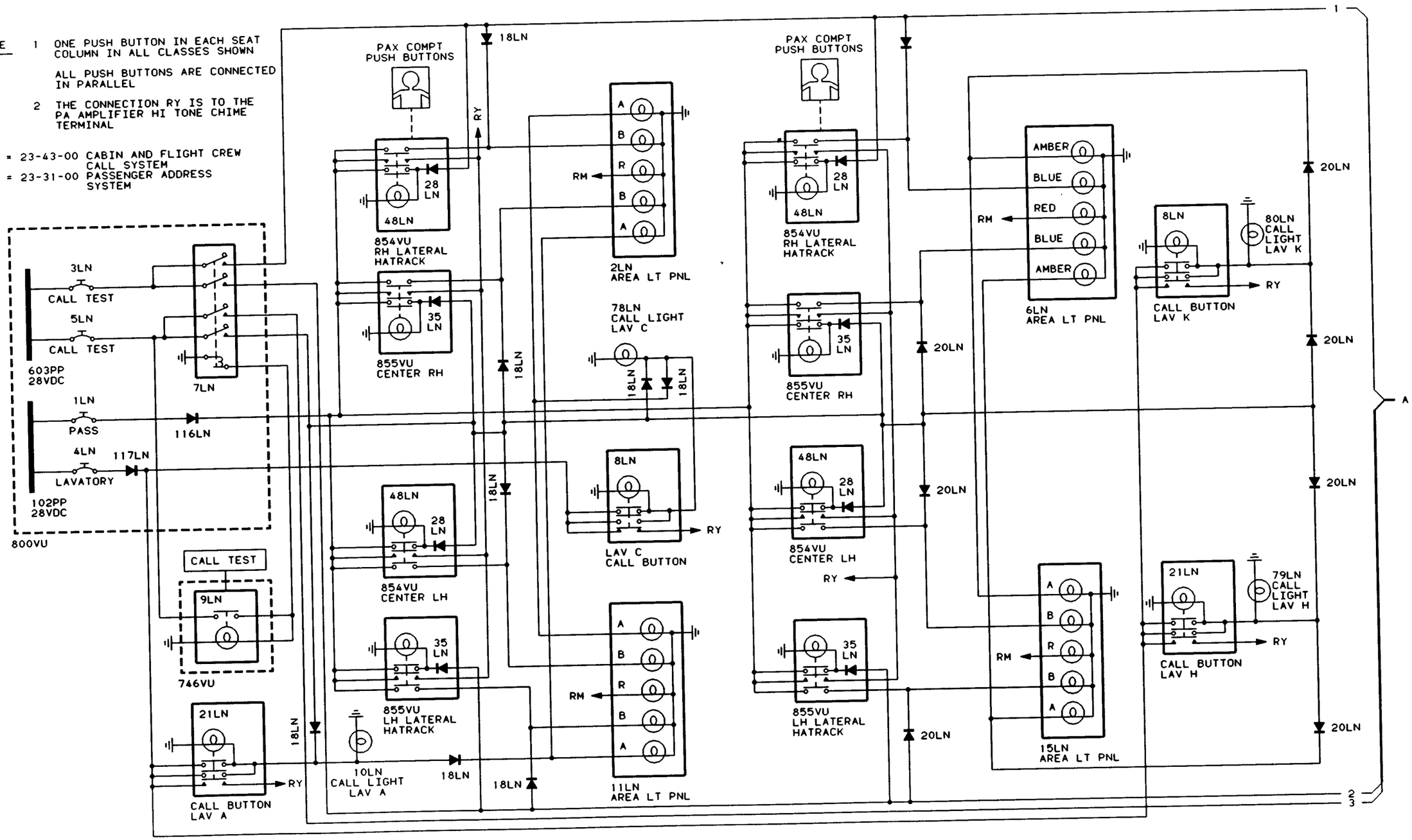
NOTE 1 ONE PUSH BUTTON IN EACH SEAT COLUMN IN ALL CLASSES SHOWN

ALL PUSH BUTTONS ARE CONNECTED IN PARALLEL

2 THE CONNECTION RY IS TO THE PA AMPLIFIER HI TONE CHIME TERMINAL

RM = 23-43-00 CABIN AND FLIGHT CREW CALL SYSTEM
RY = 23-31-00 PASSENGER ADDRESS SYSTEM



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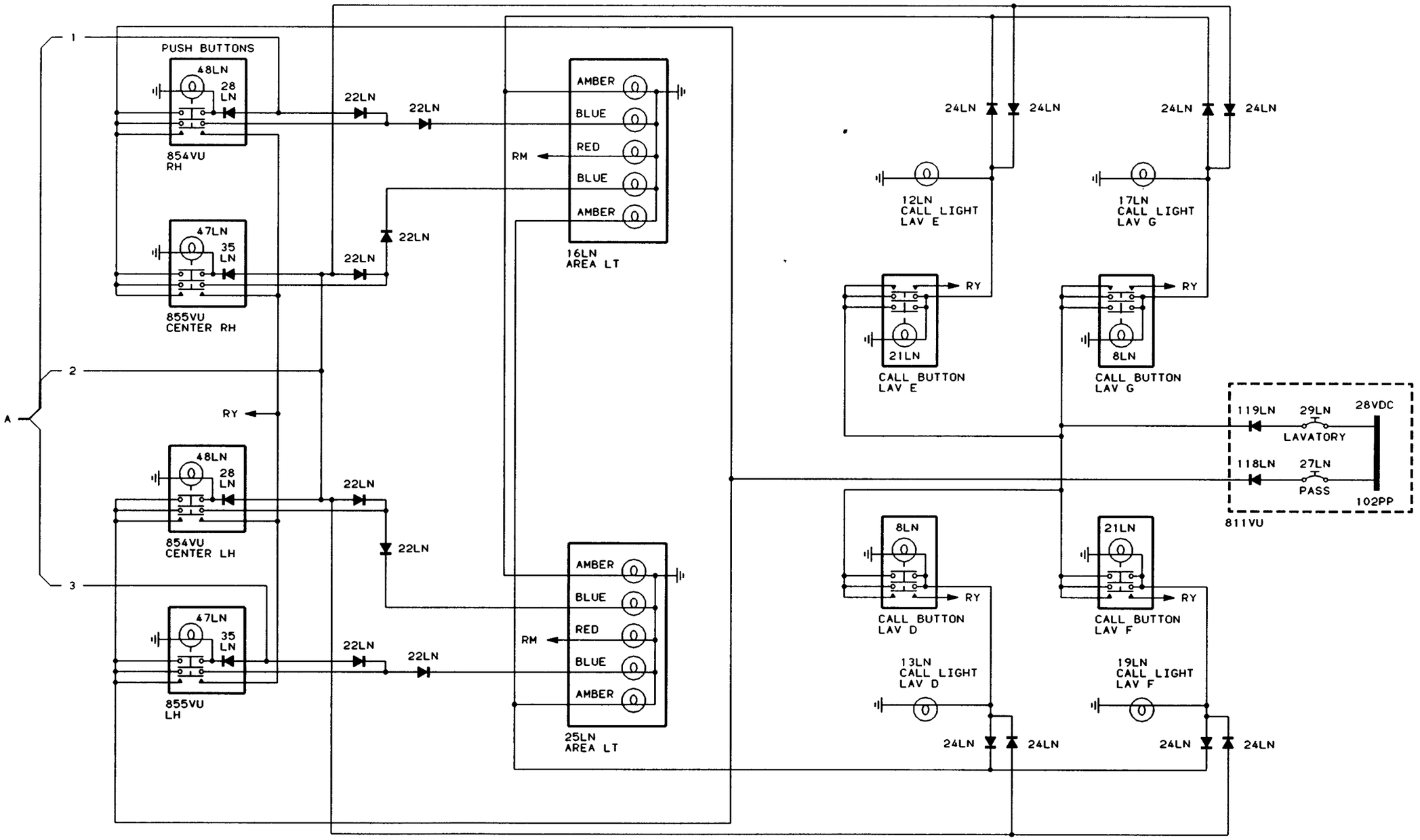
Call System - Schematic (Sheet 1/2)
Figure 002



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Call System - Schematic (Sheet 2/2)
Figure 002

A. With busbars 102PP and 603PP energized power is supplied, via circuit breakers, to all passenger and lavatory call buttons.
(1) When a first class passenger call button is pressed the following occurs:
(a) A supply from the call button energizes the chime circuit in the PA amplifier, a HI-tone chime is broadcast over all loudspeakers.
(b) The appropriate blue light in one of the forward area light panels comes on.
(c) The internal light in the selected passenger call button comes on.
(d) The attendant proceeds to the passenger seat and cancels the call by pressing the selected call button again.
(2) The operation when the call is made from the economy class compartment is the same, except that the mid and aft area lights come on.
(3) When a call is made from a forward lavatory the following occurs:
(a) A supply from the call button energizes the chime circuit in the PA amplifier, a HI-tone chime is broadcast over all loudspeakers.
(b) The appropriate amber light in the related area light comes on.
(c) The yellow call light outside the lavatory, from which the call is made, comes on.
(d) The integral light in the call button comes on.
(4) The operation when the call is made from the mid and rear lavatories is the same as in (3) except that the mid and aft area lights come on.
(5) When the CALL TEST pushbutton on the attendant's panel is pressed the test relay energizes and supplies all lights in the call system with 28 V DC. The integral light in the test pushbutton switch comes on.

CALL SYSTEM - DESCRIPTION AND OPERATION

R 1. General

R The lavatory-attendant call system provides audio and visual indications.
R The audio call is a high-tone signal from the passenger address system.
R Visual indication is given by the area and call lights.
R NOTE: The passenger call system is described in AMM, Chapter 23-38-00.

2. Component Location

R (Ref. Fig. 001)

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF.
2LN	LIGHT PANEL-AREA FC		224		33-23-11
6LN	LIGHT PANEL-AREA BC		244		33-23-11
7LN	RELAY-TEST	800VU	223		
8LN	CALL BUTTON-LAVATORIES A, W, Z	816VU	221/232/252		
10LN	CALL LIGHT-LAVATORY A		223		
11LN	LIGHT PANEL-AREA FC		223		33-23-11
15LN	LIGHT PANEL-AREA BC		243		33-23-11
16LN	LIGHT PANEL-AREA YC	840VU	254		33-23-11
18LN	DIODE MODULE		223		
20LN	DIODE MODULE		233		
21LN	CALL BUTTON-LAVATORIES T, Y	817VU	231/251		
	CALL BUTTON-LAVATORY X		253		
22LN	DIODE MODULE		253		
24LN	DIODE MODULE		253		
25LN	LIGHT PANEL-AREA YC	841VU	253		33-23-11
50LN	LIGHT PANEL-AREA YC		263		33-23-11
114LN	CALL LIGHT-LAVATORY Y		253		
115LN	CALL LIGHT-LAVATORY Z		254		
117LN	DIODE	800VU	223		
	DIODE-LAVATORY X		253		
119LN	DIODE	811VU	260		
	CALL LIGHT-LAVATORY X		253		
135LN	CALL LIGHT-LAVATORY T		233		
136LN	CALL LIGHT-LAVATORY W		234		
12MK	BITE PANEL		221		

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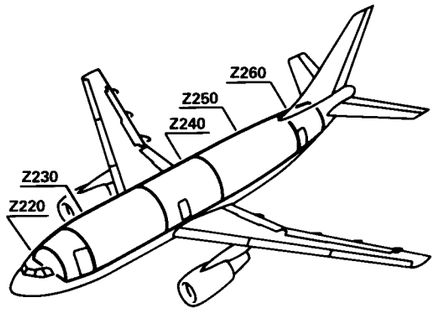

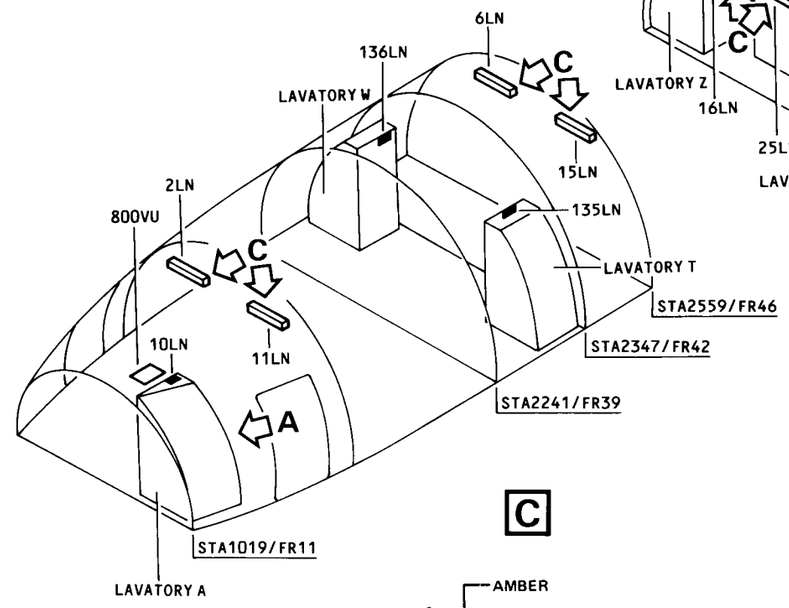

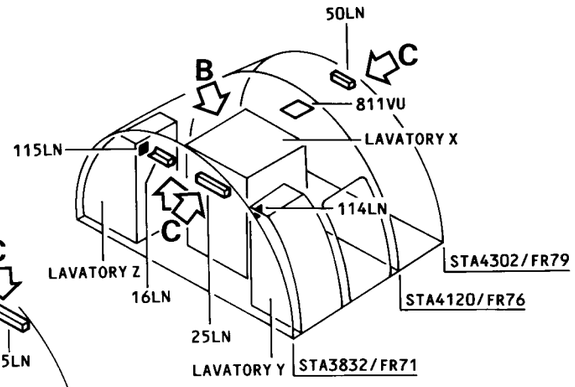

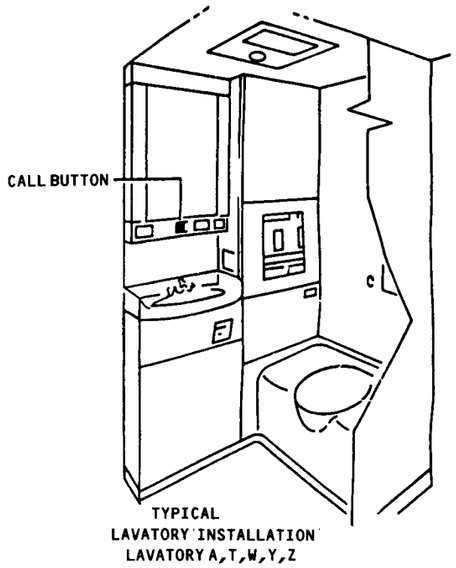

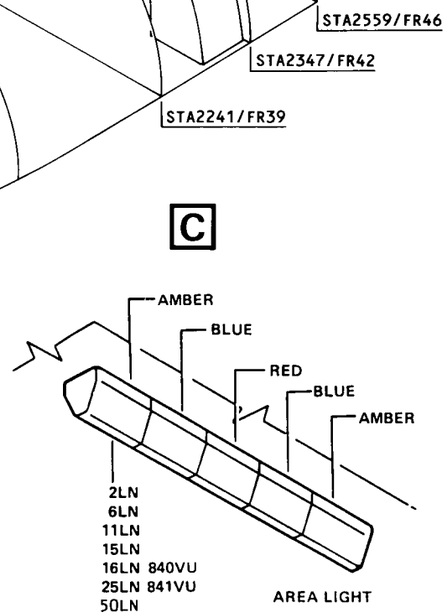

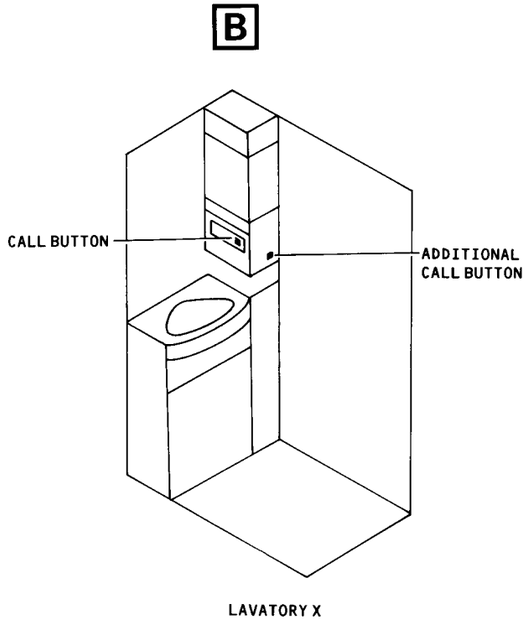

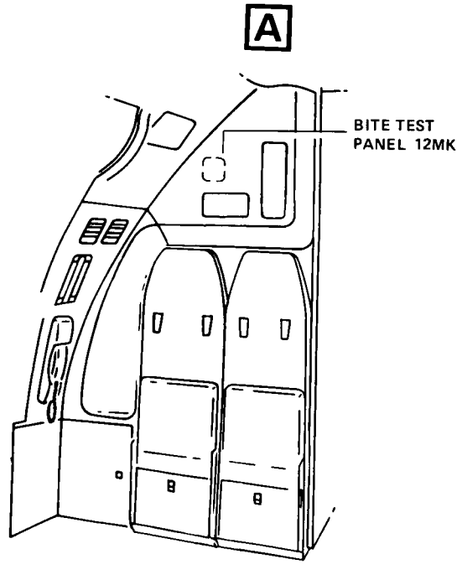

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R Call System - Locations
Figure 001

R 3. Description

R Power for the call system is supplied from the 28 V DC busbar. The call system consists of:

R A. Lavatory Call Buttons

R Lavatory call buttons are installed under the mirror in each lavatory except lavator X. In lavatory X are two call buttons in the lower service cabinet installed.

R They are of the mechanically latching type and contain an indicator light. When the call button is actuated it initiates an audio tone and the appropriate area light and the indicator light come on.

R B. Area Lights

R Seven area light panels are installed in the passenger compartment; two AFT of FWD entrance door LH and RH, two adjacent to emergency exit LH and RH, two FWD of AFT entrance door LH and RH and one in work area between AFT galleys. Each area light comprises two blue and two amber lights.

R (1)A blue light comes on whenever a passenger call is made. It indicates from which seat area the call originated. For example, the left blue light in the LH area light panel installed AFT of FWD entrance door comes on when a call is initiated from the left seat column in the first class compartment.

R (2)An amber light comes on whenever a call is made from a lavatory. It indicates from which lavatory the call originated. For example, if a call is made from the rear RH lavatory, the right amber lights in the AFT area light panels comes on. If a call is made from another lavatory the amber lights in the appropriate area light panels comes on.

R C. Call Lights

R Yellow call lights are installed outside each lavatory. They come on when a call is made from a lavatory and indicate the lavatory from which the call is made.

R D. Audio Annunciation

R When a call is made, a 28 V DC supply is connected to the PA amplifier. The call system is so designed that when a call is made the Hi chime from the PA amplifier is heard over the loudspeakers.

R E. Test Circuit

R A test circuit, consisting of a BITE panel(12MK) and a relay, enables a complete functional check of all lights, used in the call system, to be carried out.

R 4. Operation (Ref. Fig. 002)

A. With busbars 102PP and 603PP energized, power is supplied, via circuit breakers, to all lavatory call buttons.

(1)When a call is made from a FWD, MID or AFT lavatory the following occurs:

(a)A supply from the call button energizes the chime circuit in the PA amplifier and a Hi chime is heard over all loudspeakers.

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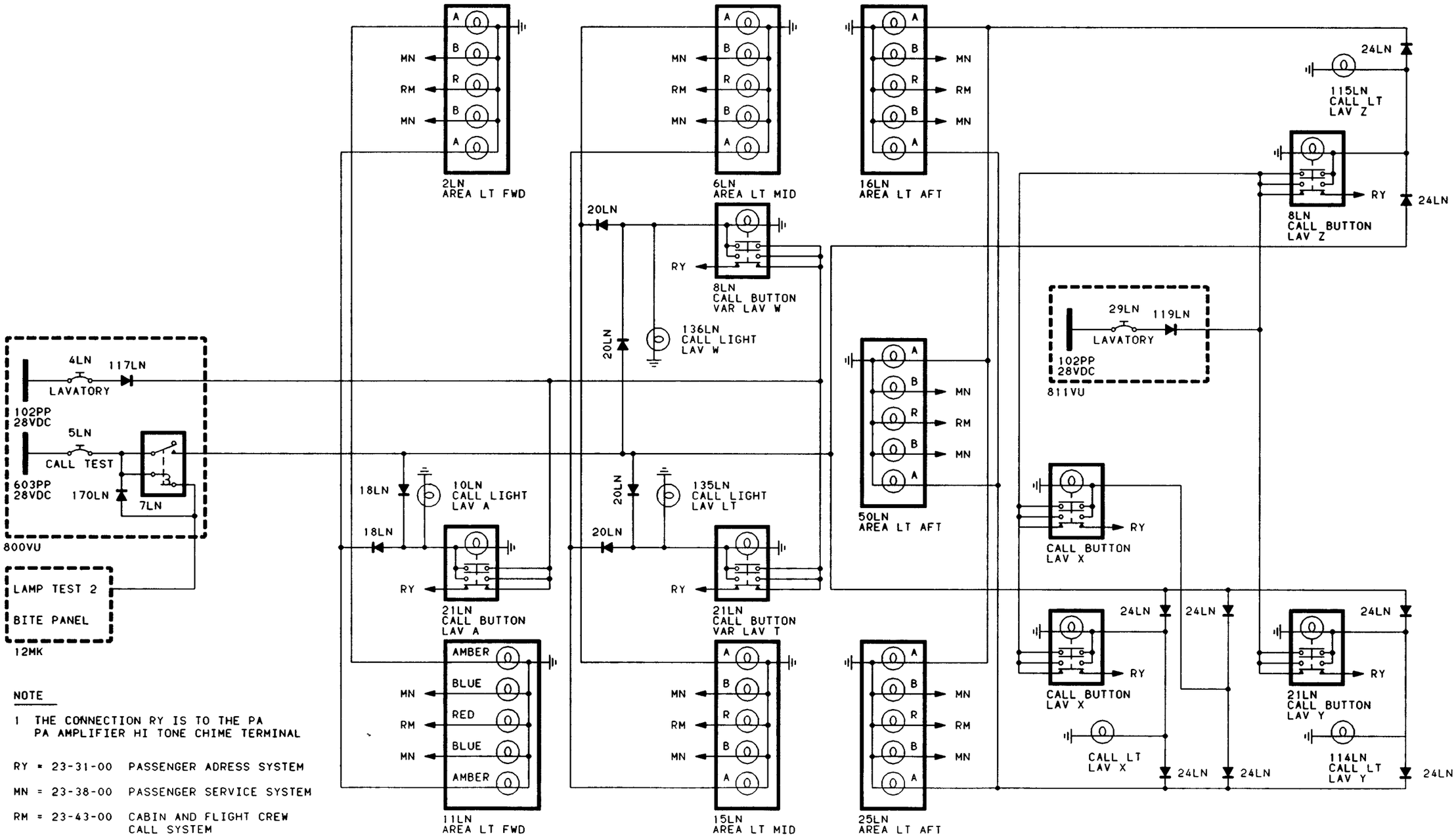


NOTE

1 THE CONNECTION RY IS TO THE PA
PA AMPLIFIER HI TONE CHIME TERMINAL

RY = 23-31-00 PASSENGER ADRESS SYSTEM

MN = 23-38-00 PASSENGER SERVICE SYSTEM

RM = 23-43-00 CABIN AND FLIGHT CREW CALL SYSTEM

B M 6 33 23 00 0 CMV0 00

Call System - Schematic
Figure 002

R

(b)The appropriate amber light in the respective area light panel comes on.

(c)The yellow call light, outside the lavatory from which the call is made, comes on.

R (d)The integral light in the call button comes on.

(2)When **LAMP TEST** on **BITE** panel is selected, the test relay energizes and supplies all lights in the call system with **28 V DC**.
The **TEST OK LIGHTS** on the **BITE** panel come on and a Hi chime is heard over
R the loudspeaker.

1. Operational Test

A. Reason for the Job
(1)Test of call system lights
(2)Test of passenger compartment call system
(3)Test of lavatory call system

B. Equipment and Materials

ITEM	DESIGNATION
(1)	Electrical Ground Power Unit - 3-Phase, 115/200 V, 400 Hz

Referenced Procedures

- 24-41-00, P. Block 301	AC External Power Control
- 23-31-00, P. Block 501	Passenger Address System

C. Procedure
(1)Job Set-Up
(a)Connect electrical ground power unit and energize aircraft electrical network (Ref. 24-41-00, P. Block 301).
(b)Make certain that electronics racks ventilation is correct.
(c)Make certain that the following circuit breakers are closed:

PANEL	SERVICE	IDENT.	LOCATION
800VU	CALL SYSTEM PASS	1LN	E13
800VU	CALL SYSTEM TEST	3LN	E10
800VU	CALL SYSTEM LAVATORY	4LN	E12
800VU	CALL SYSTEM TEST	5LN	E11
811VU	CALL SYSTEM PASSENGER	27LN	B14
811VU	CALL SYSTEM LAVATORY	29LN	B16

(d)Make certain that the passenger address system is working (Ref. 23-31-00, P. Block 501).
(2)Test
(a)Call System Light

ACTION	RESULT
On panel 746VU: 1. Press pushbutton switch CALL TEST.	In Passenger Compartment: - In all area light panels two blue and two amber lights come on. - Outside each lavatory an indicator light comes on. - In all overhead panels the call button indicator lights come on. - In each lavatory the call button indicator lights come on.

ACTION	RESULT
	- Integral light in CALL TEST pushbutton switch comes on.
2. Press pushbutton switch CALL TEST again.	- All lights in 1. go off.

(b)Passenger Compartment Call System

ACTION	RESULT
In First Class Compartment:	In First Class Compartment:
1. Press call button in LH lateral overhead stowage compartment.	- In area light panel LH at FWD entrance (11LN) the left blue light comes on. - The indicator light in the selected call button comes on. - A HI-tone chime is heard over all loudspeakers.
2. Press selected call button again.	- Lights in 1. go off.
3. Press call button in LH center overhead stowage compartment.	- In area light panel LH at FWD entrance (11LN) the right blue light comes on. - The indicator light in the selected call button comes on. - A HI-tone chime is heard over all loudspeakers.
4. Press selected call button again.	- Lights in 3. go off.
5. Press call button in RH center overhead stowage compartment.	- In area light panel RH at FWD entrance (2LN) the left blue light comes on. - The indicator light in the selected call button comes on. - A HI-tone chime is heard over all loudspeakers.
6. Press selected call button again.	- Lights in 5. go off.
7. Press call button in RH lateral overhead stowage compartment.	- In area light panel RH at FWD entrance (2LN) the right blue light comes on. - The indicator light in the selected call button comes on. - A HI-tone chime is heard over all loudspeakers.
8. Press selected call button again.	- Lights in 7. go off.
In Economy Class Compartment FWD:	In Economy Class Compartment FWD:
9. Press call button in LH lateral overhead stowage compartment.	- In area light panel LH adjacent to emergency exit (15LN), the left blue light comes on. - the indicator light in selected call button comes on.

ACTION	RESULT
	- A HI-tone chime is heard over all loudspeakers.
10. Press selected call button again.	- Lights in 9. go off.
11. Press call button in LH center overhead stowage compartment.	- In area light panel LH adjacent to emergency exit (15LN), the right blue light comes on. - The indicator light in selected call button comes on. - A HI-tone chime is heard over all loudspeakers.
12. Press selected call button again.	- Lights in 11. go off.
13. Press call button in RH center overhead stowage compartment.	- In area light panel RH adjacent to emergency exit (6LN), the left blue light comes on. - The indicator light in selected call button comes on. - A HI-tone chime is heard over all loudspeakers.
14. Press selected call button again.	- Lights in 13. go off.
15. Press call button in RH lateral overhead stowage compartment.	- In area light panel RH adjacent to emergency exit (6LN), the right blue light comes on. - The indicator light in selected call button comes on. - A HI-tone chime is heard over all loudspeakers.
16. Press selected call button again.	- Lights in 15. go off.
In Economy Class Compartment AFT:	In Economy Class Compartment AFT:
17. Press call button in LH lateral overhead stowage compartment.	- In area light panel LH AFT entrance (25LN), the left blue light comes on. - The indicator light in the selected call button comes on. - A HI-tone chime is heard over all loudspeakers.
18. Press selected call button again.	- Lights in 17. go off.
19. Press call button in LH center overhead stowage compartment.	- In area light panel LH AFT entrance (25LN), the right blue light comes on. - The indicator light in the selected call button comes on. - A HI-tone chime is heard over all loudspeakers.
20. Press selected call button again.	- Lights in 19. go off.
21. Press call button in RH center overhead stowage compartment.	- In area light panel RH AFT entrance (16LN), the left blue light comes on. - The indicator light in the selected call button comes on.

ACTION	RESULT
	- A HI-tone chime is heard over all loudspeakers.
22. Press selected call button again.	- Lights in 21. go off.
23. Press call button in RH lateral overhead stowage compartment.	- In area light panel RH AFT entrance (16LN), the right blue light comes on. - The indicator light in the selected call button comes on. - A HI-tone chime is heard over all loudspeakers.
24. Press selected call button again.	- Lights in 23. go off.

(c)Lavatory Call System.

ACTION	RESULT
In Lavatory A:	In Passenger Compartment:
1. Press call button.	- In area light panels LH and RH at FWD entrance (11LN and 2LN) the left amber light comes on. - Yellow call light outside lavatory A comes on. - A HI-tone chime is heard over all loudspeakers. Lavatory A: - The integral indicator light in the call button comes on.
2. Press call button again.	- Lights in 1. go off.
In Lavatory C:	In Passenger Compartment:
3. Press call button.	- In area light panels LH and RH at FWD entrance (11LN and 2LN) the right amber light comes on. - Yellow call light outside lavatory C comes on. - A HI-tone chime is heard over all loudspeakers. Lavatory C: - The integral indicator light in the call button comes on.
4. Press call button again.	- Lights in 3. go off.
In Lavatory H:	In Passenger Compartment:
5. Press call button.	- In area light panels LH and RH adjacent emergency exit (15LN and 6LN) the left amber light comes on. - Yellow call light outside lavatory H comes on. - A HI-tone chime is heard over all loudspeakers. Lavatory H:

ACTION	RESULT
	- The integral indicator light in the call button comes on.
6. Press call button again.	- Lights in 5. go off.
In Lavatory K:	In Passenger Compartment:
7. Press call button.	- In area light panels LH and RH adjacent emergency exit (15LN and 6LN) the right amber light comes on. - Yellow call light outside lavatory K comes on. - A HI-tone chime is heard over all loudspeakers. Lavatory K: - The integral indicator light in the call button comes on.
8. Press call button again.	- Lights in 7. go off.
In Lavatories D and F:	In Passenger Compartment:
9. Press call button.	- In area light panels LH and RH at AFT entrance (25LN and 16LN) the left amber light comes on. - Yellow call light outside lavatory being tested comes on. - A HI-tone chime is heard over all loudspeakers. In Lavatory being tested: - The integral indicator light in the call button comes on.
10. Press call button again.	- Lights in 9. go off.
In Lavatories E and G:	In Passenger Compartment:
11. Press call button.	- In area light panels LH and RH at AFT entrance (25LN and 16LN) the right amber light comes on. - Yellow call light outside lavatory being tested comes on. - A HI-tone chime is heard over all loudspeakers. In Lavatory being tested: - The integral indicator light in the call button comes on.
12. Press call button again.	- Lights in 11. go off.

(3)Close-Up
(a)De-energize aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).

CALL SYSTEM - ADJUSTMENT/TEST

R 1. Operational Test

R A. Reason for the Job
R NOTE : Test for passenger compartment call system is described in
R chapter 23-38-00 (Passsenger Services System).
R (1)Test of Call System Lights
R (2)Test of Lavatory Call System

R B. Equipment and Materials

R ITEM	DESIGNATION
R (1)	Electrical Ground Power Unit - 3-Phase, 115/200 V, 400 Hz

R Referenced Procedures

R	
R - 24-41-00, P. Block 301	AC External Power Control
R - 23-31-00, P. Block 501	Passenger Address System
R - 23-38-00, P. Block 501	Passenger Service System
R - 23-43-00, P. Block 501	Cabin and Flight Crew Call System

R C. Procedure
R (1)Job Set-Up
R (a)Connect electrical ground power unit and energize aircraft electrical network (Ref. 24-41-00, P. Block 301).
R (b)Make certain that electronics racks ventilation is correct.
R (c)Make certain that the following circuit breakers are closed:

R PANEL	SERVICE	IDENT.	LOCATION
R 800VU	PES/PSS	20MK	D 1
R 800VU	PES/PSS	21MK	D 2
R 800VU	PES/PSS	22MK	D 3
R 800VU	CALL SYSTEM TEST	5LN	E11
R 800VU	CALL SYSTEM LAVATORY	4LN	E12
R 811VU	CALL SYSTEM LAVATORY	29LN	B16

R (d)Make certain that the passenger address system is working (Ref. 23-31-00, P. Block 501).
R (e)Make certain that the cabin and flight crew call system is working (Ref. 23-43-00, P. Block 501).

R (2)Test
R (a)Call System Light
R NOTE : Make certain that the selector switch on BITE panel 12MK, which is behind a cover on purser station, is in position 'NORMAL'.

ACTION	RESULT
1. On BITE panel 12MK: - set selector switch in POS '2 LAMP TEST'.	In Passenger Compartment: - in all area light panels two blue and two amber lights come on. - outside each lavatory a yellow call indicator light comes on. - in all passenger service panels the call indicator light comes on. - in each lavatory the call button indicator light comes on. - a Hi chime is heard over the respective attendant loudspeakers. On BITE panel 12MK: - 'TEST OK LIGHTS' come on.
2. On BITE panel 12MK: - set selector switch in POS 'NORMAL'.	In Passenger Compartment: - the lights in (2) (a) 1. go off.

(b)Lavatory Call System

ACTION	RESULT
In Lavatory A: 1. Press call button.	In Lavatory A: - the indicator light in the selected call button comes on. In Passenger compartment: - in area light panels LH and RH at FWD entrance (11LN and 2LN) the left amber lights come on. - a yellow call light outside lavatory A comes on. - a Hi chime is heard over all loudspeakers.
2. Press call button again.	- the lights in (2) (b) 1. go off.
In Lavatory T: 3. Press call button.	In Lavatory T: - the indicator light in the selected call button comes on. In Passenger compartment: - in area light panels LH and RH adjacent emergency exit (15LN and 6LN) the left amber lights come on. - a yellow call light outside lavatory T comes on. - a Hi chime is heard over all loudspeakers.
4. Press call button again.	- the lights in (2) (b) 5. go off.
In Lavatory W: 5. Press call button.	In Lavatory W: - the indicator light in the selected call button comes on.

ACTION	RESULT
	In Passenger compartment: - in area light panels LH and RH adjacent emergency exit (15LN and 6LN) the right amber lights come on. - a yellow call light outside lavatory W comes on. - a Hi chime is heard over all loudspeakers.
6. Press call button again.	- the lights in (2) (b) 7. go off.
In Lavatory X:	In Passenger Compartment:
7. Press call button.	- In area light panels LH and RH at AFT entrance (25LN and 16LN) and in aft galley pelmet (50LN) the left amber lights come on. - Yellow call light outside lavatory X comes on. - A HI-tone chime is heard over all loudspeakers. In Lavatory X: - The integral indicator light in the call button comes on.
8. Press call button again.	- Lights in (2) (c) 7. go off.
In Lavatory Y:	In Passenger Compartment:
9. Press call button.	- In area light panels LH and RH at AFT entrance (25LN and 16LN) and in aft galley pelmet (50LN) the left amber lights come on. - Yellow call light outside lavatory Y comes on. - A HI-tone chime is heard over all loudspeakers. In Lavatory Y: - The integral indicator light in the call button comes on.
10. Press call button again.	- Lights in (2) (c) 9. go off.
In Lavatory Z:	In Passenger Compartment:
11. Press call button.	- In area light panels LH and RH at AFT entrance (25LN and 16LN) and in aft galley pelmet (50LN) the right amber lights come on. - Yellow call light outside lavatory Z comes on. - A HI-tone chime is heard over all loudspeakers. In Lavatory Z: - The integral indicator light in the call button comes on.
12. Press call button again.	- Lights in (2) (c) 11. go off.

(3)Close-Up
  (a)De-energize aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).

1. Equipment and Materials

ITEM	DESIGNATION
A.	Stepladder, 2 m (6 ft. 6 in.)
B.	Electrical Ground Power Unit - 3-Phase, 115/200 V, 400 Hz

Referenced Procedures

- 24-41-00, P. Block 301	AC External Power Control
- 25-23-11, P. Block 401	Ceiling Panels
- 25-23-13, P. Block 401	Utility Area Ceiling Panels

R **ON A/C 001-100,

2. Procedure (Ref. Fig. 401)

R **ON A/C 101-200,

R 2. Procedure (Ref. Fig. 402)

R **ON A/C 001-100,

A. Job Set-Up
(1)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
800VU	CALL SYSTEM PASS	1LN	E13
800VU	CALL SYSTEM TEST	3LN	E10
800VU	CALL SYSTEM LAVATORY	4LN	E12
800VU	CALL SYSTEM TEST	5LN	E11
811VU	CALL SYSTEM PASSENGER	27LN	B14
811VU	CALL SYSTEM LAVATORY	29LN	B16
21VU	CALLS CABIN	1RM	J 7

R **ON A/C 101-200,

R A. Job Set-Up
R (1)Open, safety and tag the following circuit breakers:

R PANEL	SERVICE	IDENT.	LOCATION
R 21VU	CALLS CABIN	1RM	J 7
R 800VU	PES/PSS	20MK	D 1
R 800VU	PES/PSS	21MK	D 2
R 800VU	PES/PSS	22MK	D 3

PANEL	SERVICE	IDENT.	LOCATION
800VU	CALL SYSTEM TEST	5LN	E11
800VU	CALL SYSTEM LAV	4LN	E12
811VU	CALL SYSTEM LAVATORY	29LN	B16

**ON A/C ALL

(2)Position stepladder as required.
(3)To gain access to the area light panels installed in utility areas, remove relevant utility area ceiling panel cover (Ref. 25-23-13, P. Block 401).
(4)To gain access to other area light panels remove relevant ceiling panel (Ref. 25-23-11, P. Block 401).

B. Removal
(1)Identify and disconnect electrical connectors (2).
(2)Remove screws (1) and washers (3) while supporting area light (4).
(3)Remove area light (4).

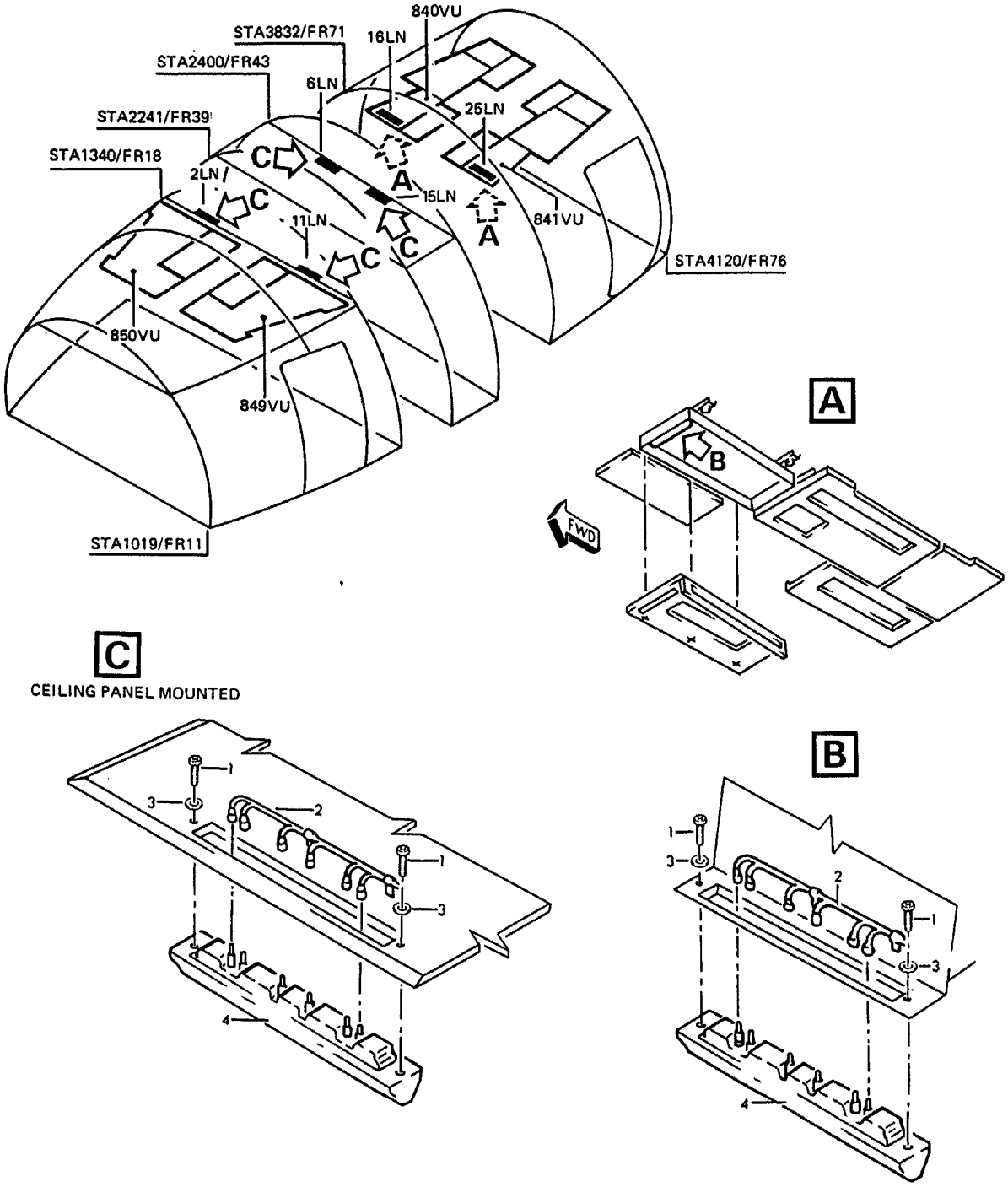
C. Installation
(1)Position area light (4).
(2)Secure area light with screws (1) and washers (3).
(3)Connect electrical connectors (2).

**ON A/C 001-100,

D. Test
(1)Connect electrical ground power unit and energize aircraft electrical network (Ref. 24-41-00, P. Block 301).
(2)Remove safety clips and tags and close circuit breakers 1LN, 3LN, 4LN, 5LN, 27LN, 29LN and 1RM.
(3)Carry out the following test procedure:

**ON A/C 101-200,

D. Test
NOTE : Make certain that the selector switch on BITE panel 12MK, which is behind a cover on purser station, is in position 'NORMAL'.
(1)Connect electrical ground power unit and energize aircraft electrical network (Ref. 24-41-00, P. Block 301).
(2)Remove safety clips and tags and close circuit breakers 4LN, 5LN, 27LN, 29LN, 20MK, 21MK, 22MK and 1RM.
(3)Carry out the following test procedure:



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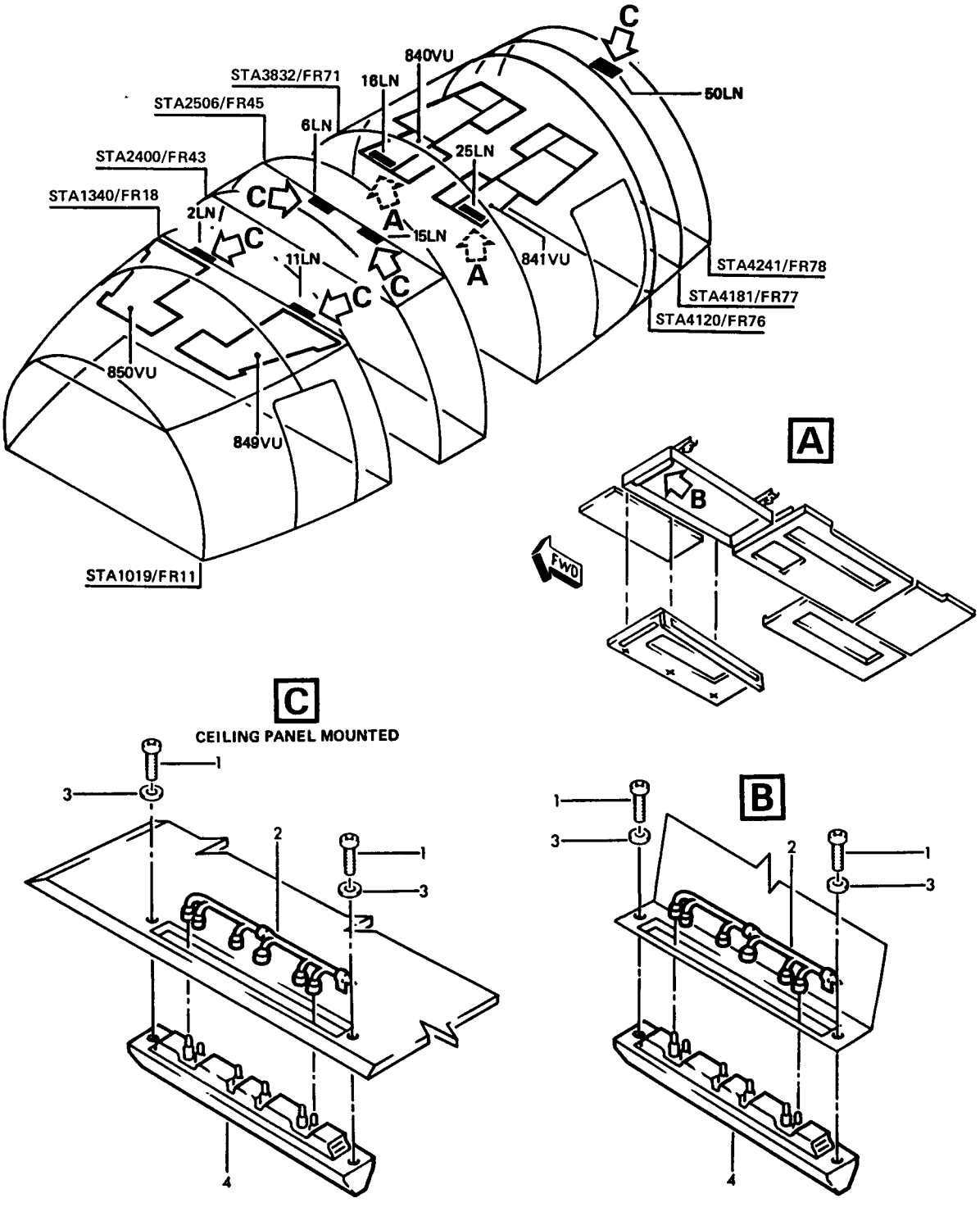
Area Light Panel
Figure 401



Area Light Panel
Figure 402

R

R **ON A/C 001-100,

ACTION	RESULT
1. On panel 746VU:	In area light panels:
- press pushbutton switch CALL TEST.	- the blue and amber lights come on.
- press pushbutton switch CALL TEST again.	- the lights go off.
2. On captain's panel 423VU:	In area light panels:
- press pushbutton ALL ATTND.	- the red light comes on.
- press pushbutton RESET.	- the red light goes off.

R **ON A/C 101-200,

R ACTION	RESULT
R 1. On Bite panel 12MK:	In area light panels:
R - set selector switch in POS '2 LAMP TEST'.	- the blue and amber lights come on.
R - set selector switch in POS 'NORMAL'.	- the lights go off.
R 2. On captain's panel 423VU:	In area light panels:
R - press pushbutton switch 'ALL ATTND'.	- the red light comes on.
R - press pushbutton 'RESET'.	- the red light goes off.

R **ON A/C ALL

E. Close-Up
(1)Install all covers and panels removed at 2A (3) and 2A (4).
(2)Make certain that working area is clean, and clear of tools and miscellaneous items of equipment.
(3)Remove stepladder, if used.
(4)De-energize aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).

R **ON A/C 001-100,

1. General
The lavatory lighting consists of the lighting installation in the lavatories. The lavatory lighting system is designed to provide two lighting levels, 50 and 100 percent.

R **ON A/C 101-200,

1. General
The lavatory lighting consists of the lighting installation in the lavatories. The lavatory lighting system is designed to provide two lighting levels, 50 and 100 percent, in each lavatory except in lavatories for handicapped persons.

R **ON A/C ALL

2. Component Location

R **ON A/C 001-100,

(Ref. Fig. 001)

R **ON A/C 101-200,

R (Ref. Fig. 002)

R **ON A/C 001-100,

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF.
2LQ	SWITCH-LIGHT	800VU	223		
3LQ	BALLAST UNIT	801VU	221		33-24-12
4LQ	LAMP-FLUORESCENT	801VU	221		33-24-11
5WJ	MICROSWITCH		221		
12LQ	SWITCH-LIGHT	811VU	260		
12WJ	MICROSWITCH		264		
13LQ	BALLAST UNIT	812VU	262		33-24-12
14LQ	LAMP-FLUORESCENT	812VU	262		33-24-11
15LQ	BALLAST UNIT	812VU	262		33-24-12
16LQ	LAMP-FLUORESCENT	812VU	262		33-24-11
16WJ	MICROSWITCH		263		
17LQ	BALLAST UNIT	813VU	261		33-24-12
17WJ	MICROSWITCH		262		
18LQ	LAMP-FLUORESCENT	813VU	261		33-24-11

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF.
18WJ	MICROSWITCH		261		
19LQ	BALLAST UNIT	813VU	261		33-24-12
20LQ	LAMP-FLUORESCENT	813VU	261		33-24-11
21LQ	BALLAST UNIT	814VU	262		33-24-12
22LQ	LAMP-FLUORESCENT	814VU	262		33-24-11
23LQ	BALLAST UNIT	814VU	262		33-24-12
24LQ	LAMP-FLUORESCENT	814VU	262		33-24-11
25LQ	BALLAST UNIT	815VU	261		33-24-12
26LQ	LAMP-FLUORESCENT	815VU	261		33-24-11
27LQ	BALLAST UNIT	815VU	261		33-24-12
28LQ	LAMP-FLUORESCENT	815VU	261		33-24-11
30LQ	LAMP-FLUORESCENT	879VU	232		33-24-11
31LQ	BALLAST UNIT	879VU	232		33-24-12
49LQ	BALLAST UNIT	879VU	222		33-24-12
50LQ	LAMP-FLUORESCENT	879VU	222		33-24-11
53LQ	BALLAST UNIT	1862VU	231		33-24-12
54LQ	LAMP-FLUORESCENT	1862VU	231		33-24-11
70WJ	MICROSWITCH		233		
71WJ	MICROSWITCH		234		
87WJ	MICROSWITCH		222		

R **ON A/C 101-200,

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF.
2LQ	SWITCH LIGHT	800VU	223		
3LQ	BALLAST UNIT	801VU	221		33-24-12
4LQ	LAMP-FLUORESCENT	801VU	221		33-24-11
5WJ	MICROSWITCH	801VU	221		
12LQ	SWITCH-LIGHT	811VU	260		
74WJ	MICROSWITCH		254		
76WJ	MICROSWITCH		253		
82LQ	LAMP-FLUORESCENT	1864VU	252		33-24-11
82WJ	MICROSWITCH		244		
83LQ	BALLAST UNIT	1864VU	252		33-24-12
83WJ	MICROSWITCH		243		
84LQ	LAMP-FLUORESCENT	1864VU	252		33-24-11
85LQ	BALLAST UNIT	1864VU	252		33-24-12
86LQ	LAMP-FLUORESCENT	1865VU	251		33-24-11
87LQ	BALLAST UNIT	1865VU	251		33-24-12
88LQ	LAMP-FLUORESCENT	1865VU	251		33-24-11
89LQ	BALLAST UNIT	1865VU	251		33-24-12
92LQ	LAMP-FLUORESCENT	1871VU	242		33-24-11
93LQ	BALLAST UNIT	1871VU	242		33-24-12
96LQ	LAMP-FLUORESCENT	1870VU	241		33-24-11
97LQ	BALLAST UNIT	1870VU	241		33-24-12

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF.
	MICROSWITCH		250		
	FLUORESCENT TUBE		250		33-24-11
	BALLAST UNIT		250		33-24-12

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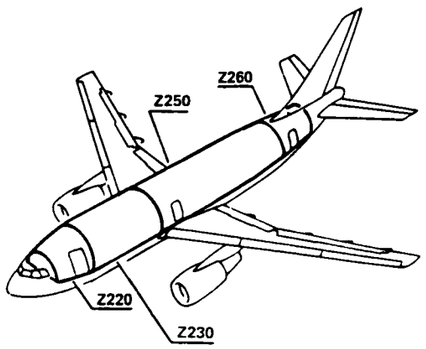

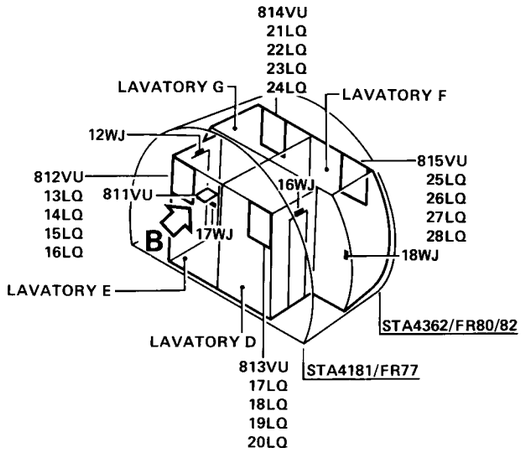

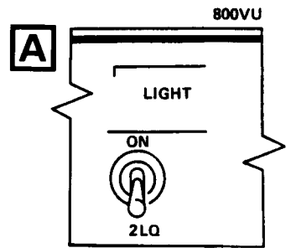

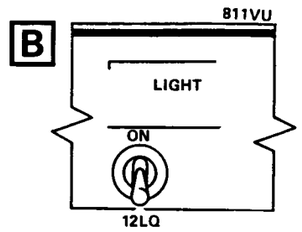

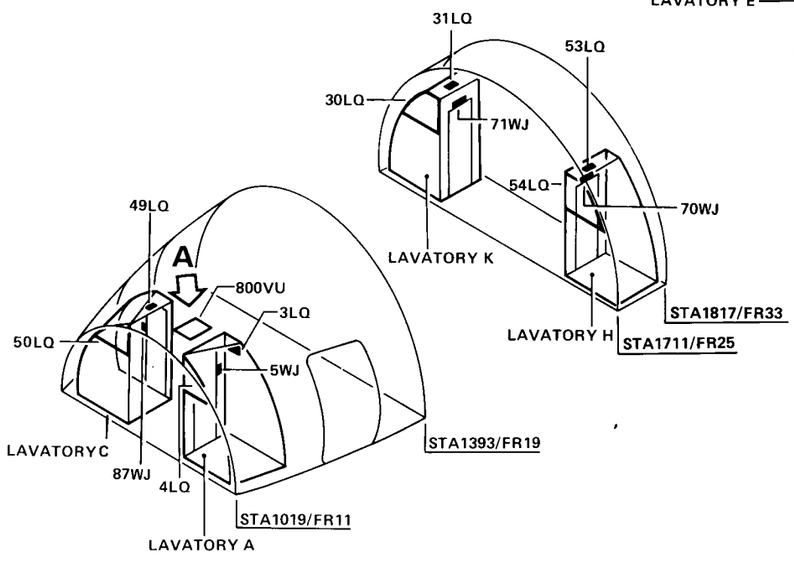

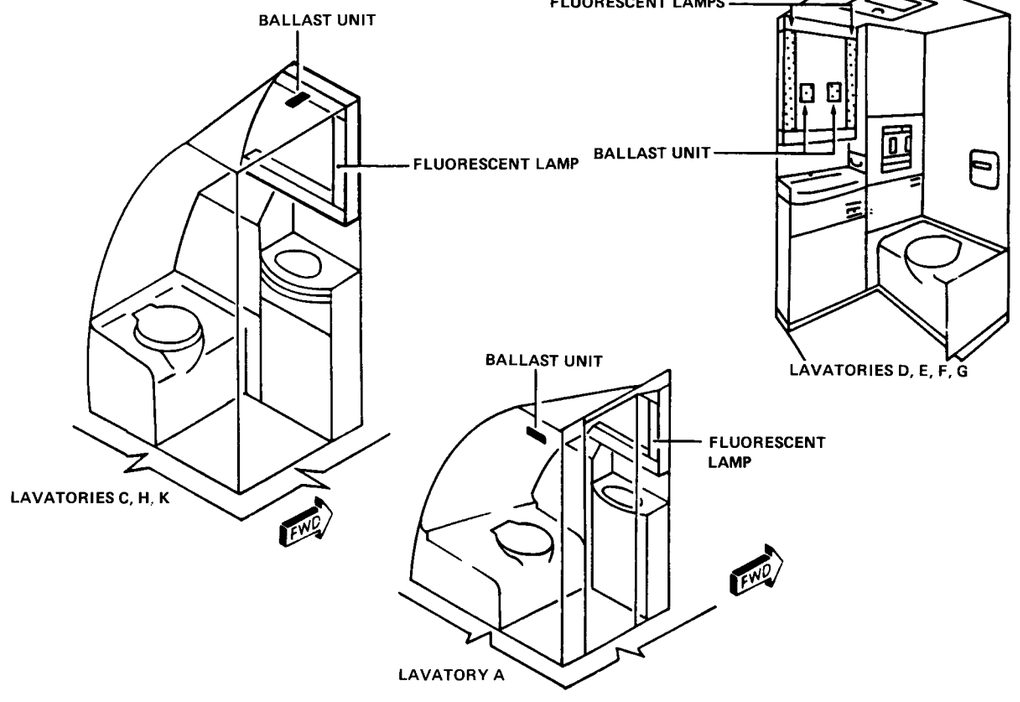

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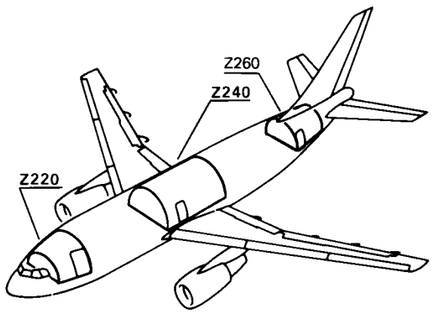
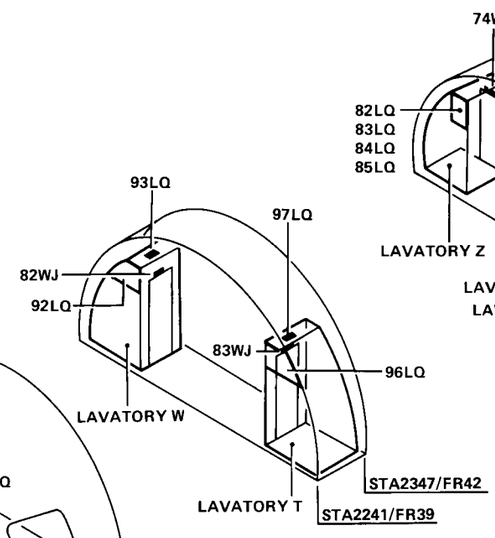
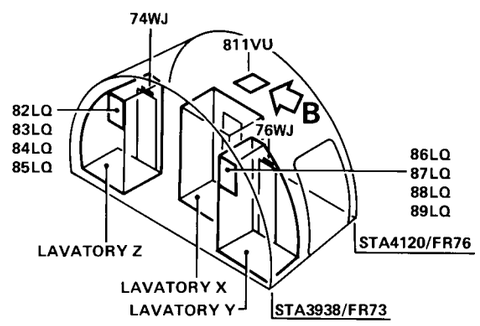
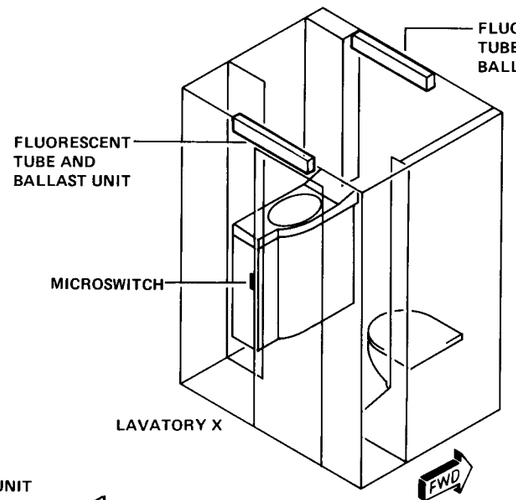
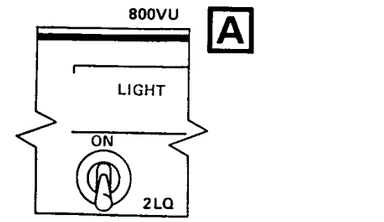
LAVATORY LIGHTING - Component Location
Figure 001

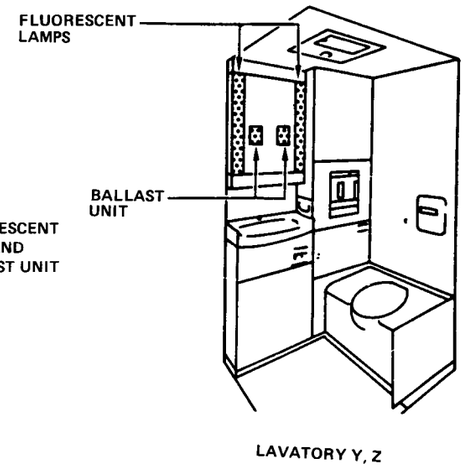


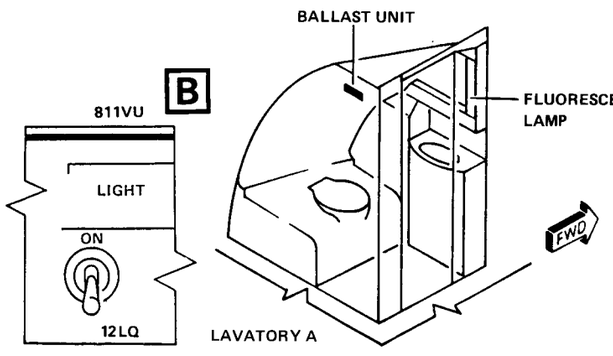


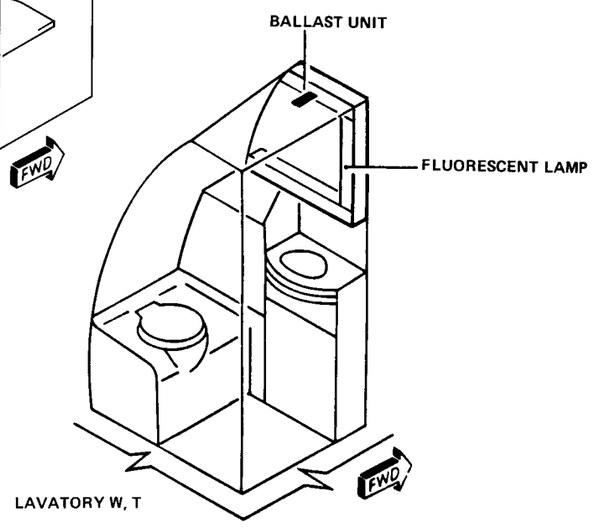












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R LAVATORY LIGHTING - Component Location
Figure 002

R **ON A/C 001-100,

3. Description

A. The lavatory lighting system comprises:
- fluorescent lamps fitted adjacent to the lavatory mirror.
- ballast units to control the power to the lamps. A fuse is fitted in the input circuit of each unit.
- toggle switches 2LQ on 800VU and 12LQ on 811VU to control the 115 V AC power for lavatory lighting.

B. The two-level lighting of all lavatories, except F and G, is achieved by varying the output capacitive impedance of the ballast unit which varies the power supplied to the fluorescent lamp.
Microswitches, one installed adjacent to each lavatory door, control the switching of the ballast units.

C. The system is supplied by 115 V AC from the busbar 215XP via circuit breaker LAVATORY/LIGHT (1LQ) on 800VU and busbar 216XP via circuit breaker LAVATORY/LIGHT (11LQ) on 811VU.

D. 28 V DC to control the ballast units of all lavatories, except F and G, is supplied by busbar 102PP via circuit breakers LAVATORY/OCCUPIED (1WJ) on 800VU and LAVATORY/OCCUPIED (11WJ) on 811VU.
- lavatories F and G are for handicapped persons and illuminate with 100 % light intensity only.

R **ON A/C 101-200,

R 3. Description

R A. The lavatory lighting system comprises:
R - fluorescent lamps fitted adjacent to the lavatory mirror.
R - ballast units to control the power to the lamps. A fuse is fitted in the input circuit of each unit.
R - toggle switches 2LQ on 800VU and 12LQ on 811VU to control the 115 V AC power for lavatory lighting.

R B. The two-level lighting of all lavatories, except X is achieved by varying the output capacitive impedance of the ballast unit which varies the power supplied to the fluorescent lamp.
R Microswitches, one installed adjacent to each lavatory door, control the switching of the ballast unit.

R C. The system is supplied by 115 V AC from the busbar 215XP via circuit breaker LAVATORY/LIGHT (1LQ) on 800VU and 216XP via circuit breaker LAVATORY/LIGHT (11LQ) on 811VU.

R D. 28 V DC for control of the ballast units is supplied by busbar 102PP via
R circuit breakers LAVATORY/OCCUPIED (1WJ) on 800VU and LAVATORY/OCCUPIED
R (11WJ) on 811VU.
R - lavatory X is for handicapped persons and illuminates with 100 %
R light intensity only.

R **ON A/C 001-100,

4. Operation

A. When the busbars are energized and circuit breakers closed 115 V AC is supplied to the toggle switches.
(1)The 50 % switching relay in each ballast unit is energized by 28 V DC via door microswitches.
(2)In the ON position, the toggle switches supply power to the ballast units.
(3)The lamps in lavatories F and G illuminate with 100 % light intensity.
(4)The transformers in the ballast units of all lavatories supply the low voltage filament heating power and strike voltage required by the fluorescent lamps. The lamps in each lavatory illuminate with 50 % light intensity (except in lavatories F and G).
- When a lavatory door is closed and locked, the respective door microswitch operates. The switching relay in the ballast unit de-energizes to decrease the output impedance of the unit. The lamp illuminates with 100 % light intensity.
- When a lavatory door is unlocked and opened, the respective door microswitch operates and the light intensity returns to 50 % (except in lavatories F and G).
- To provide cleaning personnel with 100 % light intensity, the push-button switch in the ceiling panel must be pressed (except in lavatories F and G).
- The light intensity will automatically return to 50 % when the lavatory door is closed.

R **ON A/C 101-200,

R 4. Operation

R A. When the busbars are energized and circuit breakers closed, 115 V AC is
R supplied to the toggle switches.
R (1)The 50 % switching relay in each ballast unit is energized by 28 V DC via
R door microswitches (except lavatory X).
R (2)In the ON position, the toggle switches supply power to the ballast
R units.
R (3)The lamps in lavatory X illuminate with 100 % light intensity.
R (4)The transformers in the ballast units of all lavatories supply the low
R voltage filament heating power and strike voltage required by the fluo-

R rescent lamps. The lamps in each lavatory illuminate with 50 % light
R intensity (except in lavatory X).
R - When a lavatory door is closed and locked the respective door micro-
R switch operates. The switching relay in the ballast unit de-energizes
R to decrease the output impedance of the unit. The lamp illuminates with
R 100 % light intensity.
R - When a lavatory door is unlocked and opened, the respective door micro-
R switch operates and the light intensity returns to 50 % (except in
R lavatory X).

R **ON A/C 001-100,

(Ref. Fig. 003)

R **ON A/C 101-200,

R (Ref. Fig. 004)

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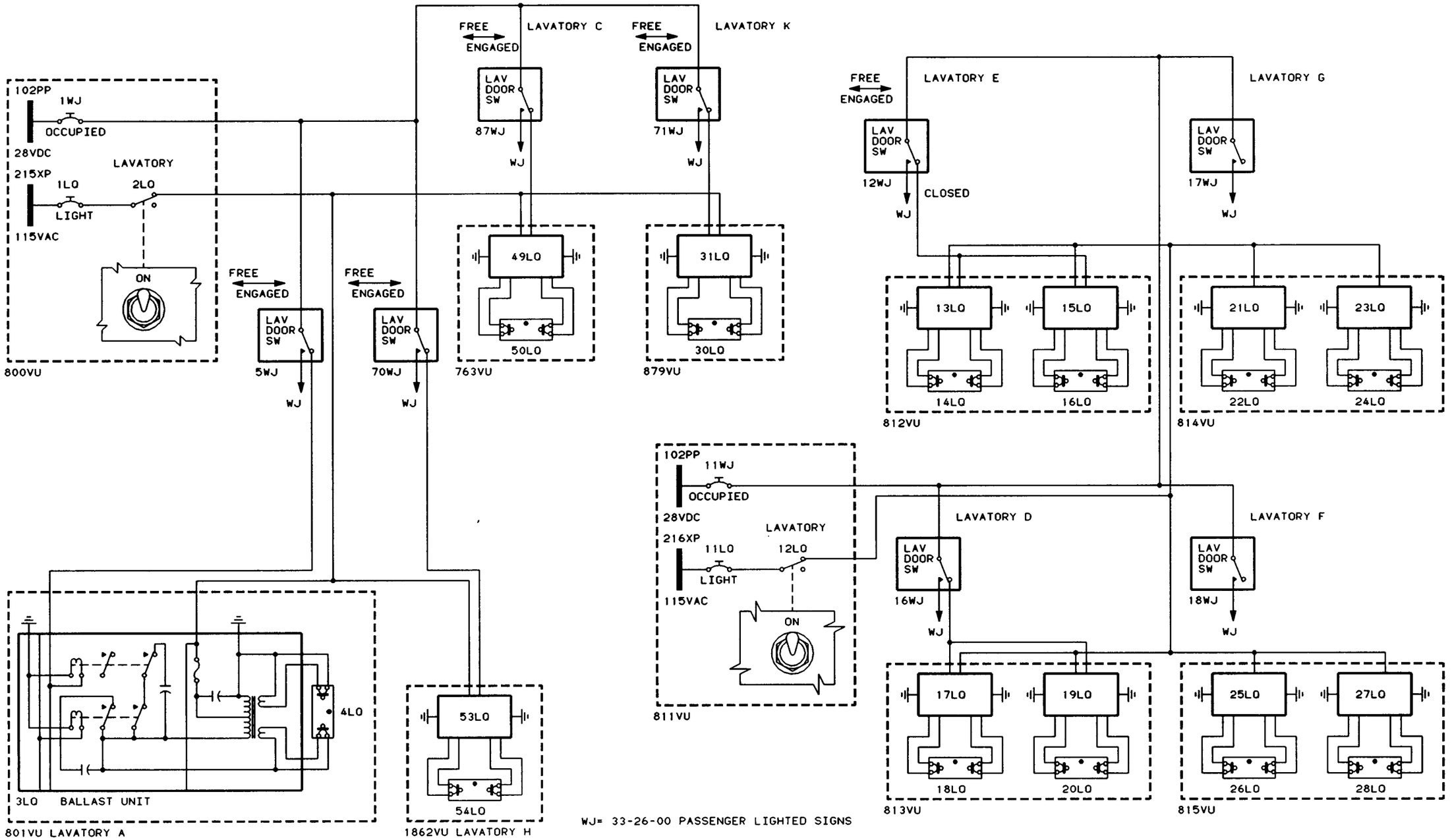
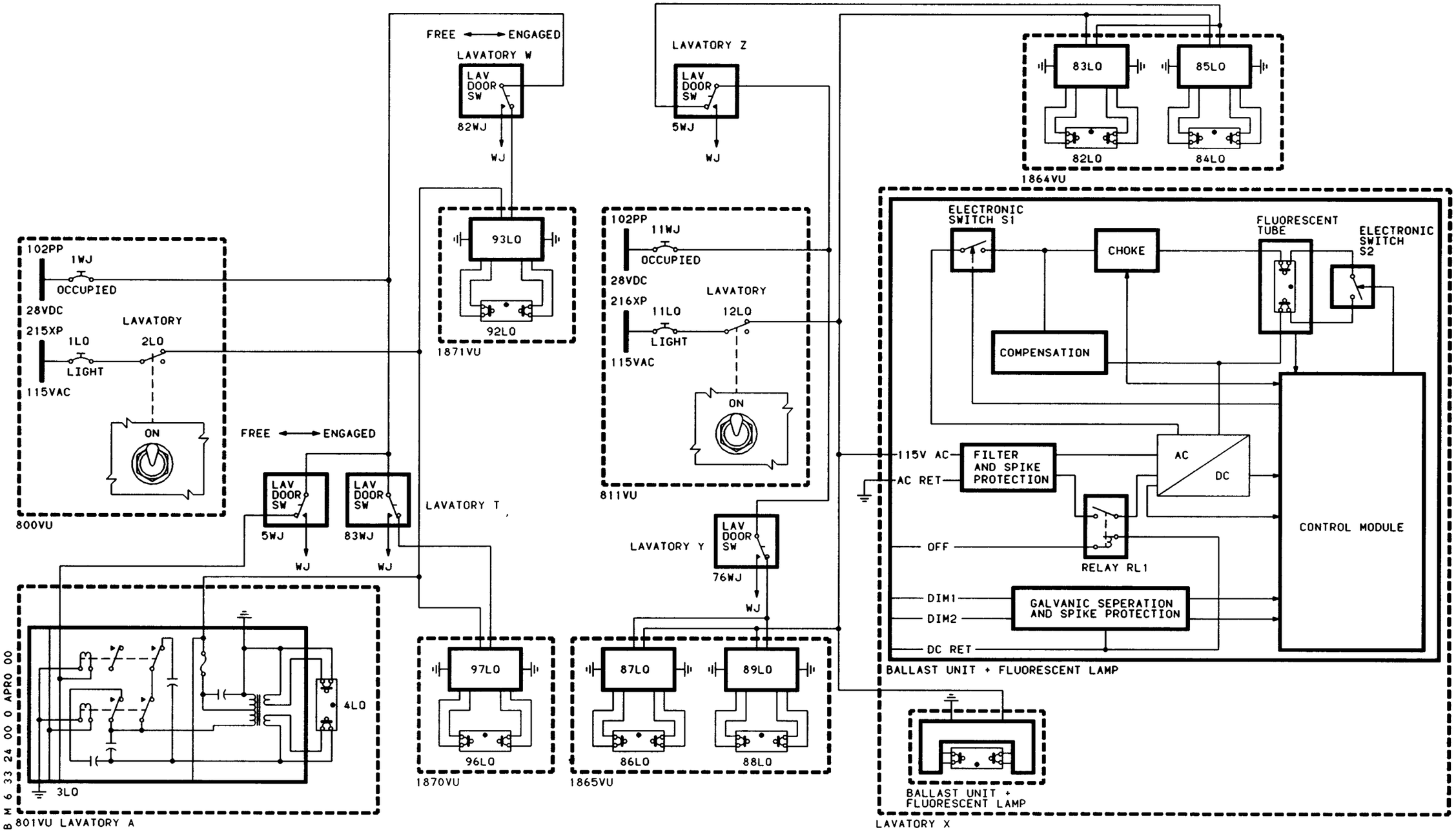


LAVATORY LIGHTING - Schematic
Figure 003



LAVATORY LIGHTING - Schematic
Figure 004

R

1. Operational Test

A. Reason for the Job
(1)Operational test of lavatory lighting

B. Equipment and Materials

ITEM	DESIGNATION
(1)	Electrical Ground Power Unit - 3-Phase, 115/200 V, 400 Hz
Referenced Procedure - 24-41-00, P. Block 301	AC External Power Control

C. Procedure
(1)Job Set-Up
(a)Connect electrical ground power unit and energize aircraft electrical network (Ref. 24-41-00, P. Block 301).
(b)Make certain that electronics racks ventilation is correct.
(c)Make certain that the following circuit breakers are closed:

PANEL	SERVICE	IDENT.	LOCATION
800VU	LAVATORY FWD & MID - LIGHT	1LQ	G 2
800VU	LAVATORY FWD & MID - OCCUPIED	1WJ	G 4
811VU	LAVATORY AFT - LIGHT	11LQ	B 2
811VU	LAVATORY AFT - OCCUPIED	11WJ	B 6

(2)Test
(a)Test forward and mid lavatory lighting

ACTION	RESULT
1. On panel 800VU: - place toggle switch 2LQ in ON position.	In lavatories: - fluorescent lamps come on with half light intensity (50 %).
2. At lavatories: - close and lock lavatory door.	In lavatories: - fluorescent lamps are on with full light intensity (100 %).
3. At lavatories: - unlock and open lavatory door.	In lavatories: - fluorescent lamps are dimmed to half light intensity (50 %).
4. On panel 800VU: - place toggle switch 2LQ in OFF position.	In lavatories: - fluorescent lamps go off.

R **ON A/C 001-100,

(b)Test aft lavatory lighting

ACTION	RESULT
1.On panel 811VU: - place toggle switch 12LQ in ON position.	In lavatories except F and G: - fluorescent lamps come on with half light intensity (50 %). In lavatories F and G: - fluorescent lamps come on with full light intensity (100 %).
2. At lavatories: - close and lock lavatory doors.	In lavatories except F and G: - fluorescent lamps are on with full light intensity (100 %). In lavatories F and G: - fluorescent lamps remain on with full light intensity (100 %).
3. At lavatories: - unlock and open lavatory doors.	In lavatories except F and G: - fluorescent lamps are dimmed to half light intensity (50 %). In lavatories F and G: - fluorescent lamps remain on with full light intensity (100 %):
4. On panel 811VU: - place toggle switch 12LQ in OFF position.	In lavatories: - all fluorescent lamps go off.

R **ON A/C 101-200,

R (b)Test aft lavatory lighting

R ACTION	RESULT
R 1. On panel 811VU: R - place toggle switch 12LQ in ON position.	In all lavatories except X: - fluorescent lamps come on with half light intensity (50 %). In lavatory X: - fluorescent lamps come on with full light intensity (100 %).
R 2. At lavatories: R - close and lock lavatory doors.	In all lavatories: - fluorescent lamps are on with full light intensity (100 %).
R 3. At lavatories: R - unlock and open lavatory doors.	In all lavatories except X: - fluorescent lamps are dimmed to half light intensity (50 %). In lavatory X: - fluorescent lamp remains on with full intensity (100 %).
R 4. On panel 811VU: R - place toggle switch 12LQ in OFF position.	In all lavatories: - all fluorescent lamps go off.

R **ON A/C ALL

(3)Close-Up
(a)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(b)De-energize aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).

1. Reason for the Job

A. Replacement of a defective lampholder

2. Equipment and Materials

ITEM	DESIGNATION
A.	Stepladder, 1.5 m (5 ft.)
B.	Cable Ties

Referenced Procedure

- 33-24-12, P. Block 401	Ballast Unit

3. Procedure

A. Job Set-Up

(1)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
800VU	LAVATORY FWD & MID-LIGHT	1LQ	G 2
800VU	LAVATORY FWD & MID-OCCUPIED	1WJ	G 4
811VU	LAVATORY AFT-LIGHT	11LQ	B 2
811VU	LAVATORY AFT-OCCUPIED	11WJ	B 6

R **ON A/C 001-100,

B. Removal (Ref. Fig. 401)

R **ON A/C 101-200,

R B. Removal (Ref. Fig. 402)

R **ON A/C 001-100,

(1)Lavatory A, C, H, K, D, E, F, or G
(a)Remove cover (1) from bracket (12).
NOTE : Cover is attached to bracket by Velcro strips (2).
(b)Remove screw (3), washer (4) and tilt lavatory panel (5) away from wall.
(c)Remove fluorescent lamp(s) (6).
(d)Release electrical wiring (7) from cable ties (8).
(e)Remove screws (9) and washers (10) to release lampholder (11).
(f)Identify wiring and disconnect lampholder (11).

C. Installation

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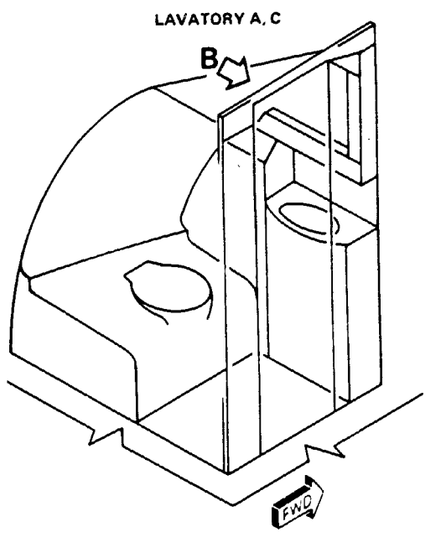
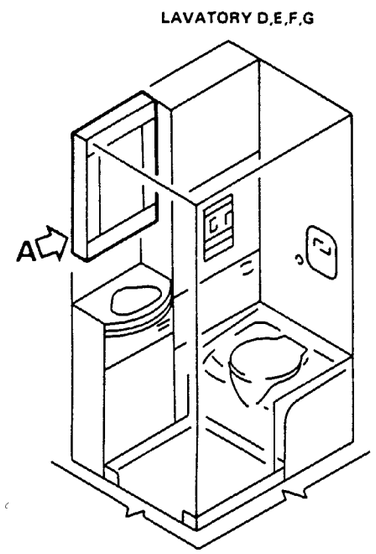
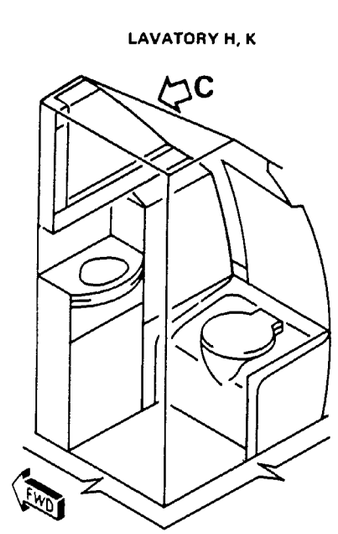
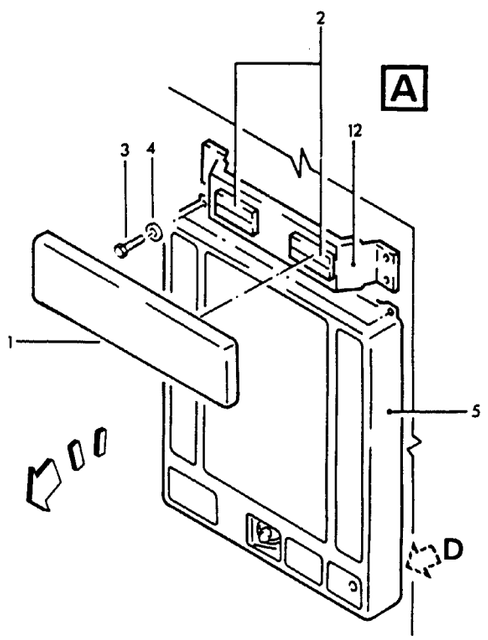
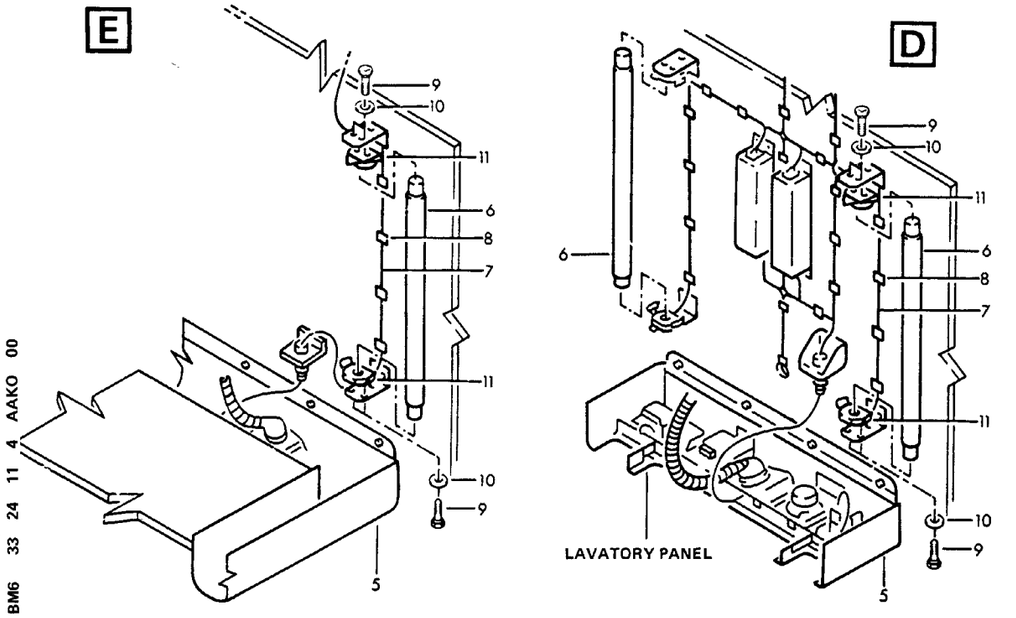
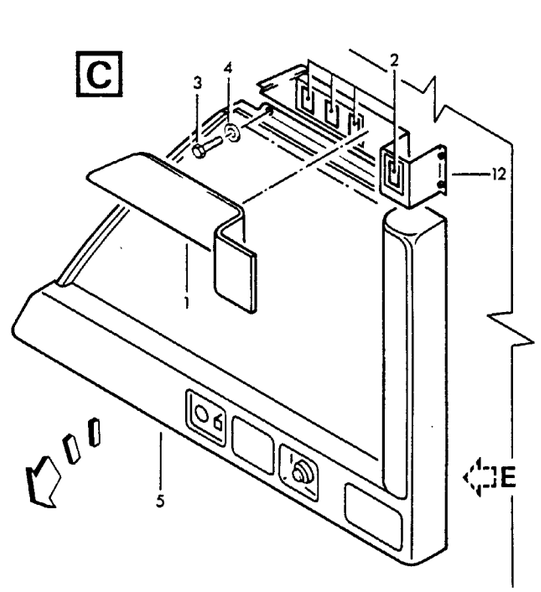


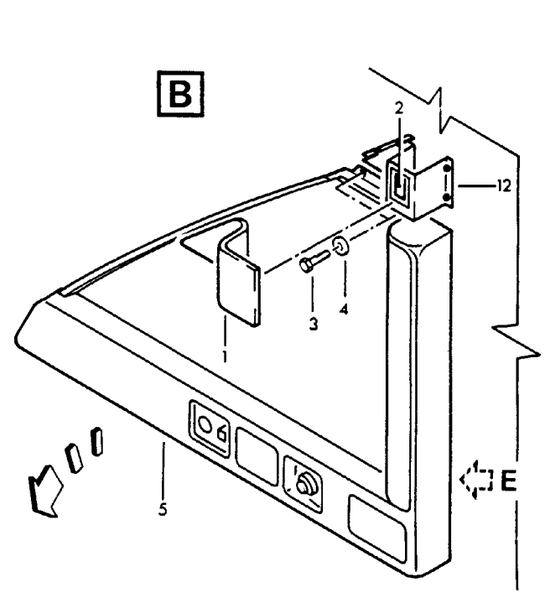




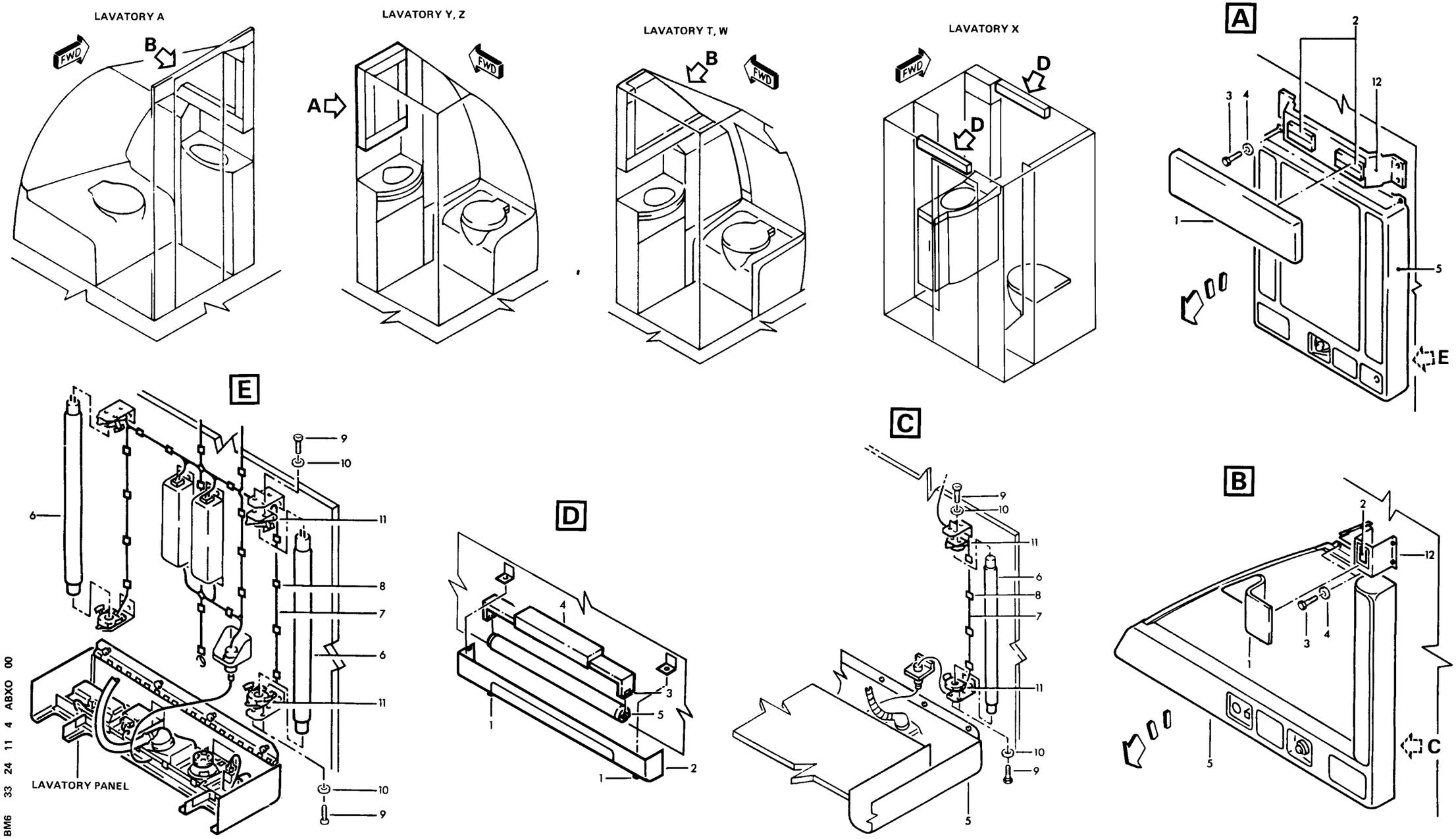








Fluorescent Lights
Figure 401



Fluorescent Lights
Figure 402

(2)Lavatory A, C, H, K, D, E, F, or G
(a)Connect identified wiring to lampholder (11).
(b)Install lampholder (11), secure with washers (10) and screws (9).
(c)Secure wiring (7) with cable ties (8).
(d)Install fluorescent lamp(s) (6).
(e)Raise lavatory panel (5), secure with washer (4) and screw (3).
(f)Install cover (1) on bracket (12).

R **ON A/C 101-200,

R (1)Lavatory A, T, W, Y or Z
R (a)Remove cover (1) from bracket (12).
R NOTE : Cover is attached to bracket by Velcro strips (2).
R (b)Remove screw (3), washer (4) and tilt lavatory panel (5) away from wall.
R (c)Remove fluorescent lamp(s) (6).
R (d)Release electrical wiring (7) from cable ties (8).
R (e)Remove screws (9) and washers (10) to release lampholder (11).
R (f)Identify wiring and disconnect lampholder (11).
R (2)Lavatory X
R (a)Release the quick release fasteners (1) and remove the fluorescent lamp cover (2).
R (b)Push the slidebuttons (3) at each end of the lampholder (4) and remove the fluorescent tube (5).
R (c)The lampholders are removeable together with the Ballast unit (4) described in chapter 33-24-12 (BALLAST UNIT - REMOVAL/INSTALLATION).
R C. Installation
R (3)Lavatory A, T, W, Y or Z
R (a)Connect identified wiring to lampholder (11).
R (b)Install lampholder (11), secure with washers (10) and screws (9).
R (c)Secure wiring (7) with cable ties (8).
R (d)Install fluorescent lamp(s) (6).
R (e)Raise lavatory panel (5), secure with washer (4) and screw (3).
R (f)Install cover (1) on bracket (12).
R (g)Remove safety clips and tags, and close circuit breakers 1WJ, 1LQ on 800VU, 11LQ and 11WJ on 811VU.
R (4)Lavatory X
R (a)Install the fluorescent tube (5).
R (b)Install fluorescent lamp cover (2) with the quick release fasteners (1).
R (c)Remove safety clips and tags, and close circuit breakers 11LQ and 11WJ on 811VU.

R **ON A/C ALL

(g)Remove safety clips and tags, and close circuit breakers 1WJ, 1LQ on 800VU, 11LQ and 11WJ on 811VU.

D. Test
(1)Carry out operational test (Ref. 33-24-12, P. Block 401).

E. Close-Up
(1)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(2)Remove stepladder.

BALLAST UNIT - REMOVAL/INSTALLATION

NOTE : When the ballast unit has to be replaced, the fluorescent lamp must be replaced as well, otherwise the new ballast unit will fail again after a short period of operation.

1. Equipment and Materials

ITEM	DESIGNATION
A.	Stepladder, 1.5 m (5 ft.)
B.	Electrical Ground Power Unit - 3-Phase, 115/200 V, 400 Hz

Referenced Procedures

- 24-41-00, P. Block 301	AC External Power Control

2. Procedure

A. Job Set-Up

(1)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
800VU	LAVATORY FWD & MID-LIGHT	1LQ	G 2
800VU	LAVATORY FWD & MID-OCCUPIED	1WJ	G 4
811VU	LAVATORY AFT-LIGHT	11LQ	B 2
811VU	LAVATORY AFT-OCCUPIED	11WJ	B 6

R **ON A/C 001-100,

B. Removal (Ref. Fig. 401)

R **ON A/C 101-200,

R B. Removal (Ref. Fig. 402)

R **ON A/C ALL

Note : When the ballast unit has to be replaced, the fluorescent lamp must be replaced as well, otherwise the new ballast unit will fail again after a short period of operation.

R **ON A/C 001-100,

(1)Lavatory A

(a)Open cover above C/A seats at lateral rear-wall of lavatory A.

(b)Disconnect electrical wiring (9) at ballast unit (10).

(c)Remove screws (7), washers (8) and ballast unit (10).

(2)Lavatory C, K or H

(a)Position stepladder.

(b)Release fasteners and hinge ceiling panel downwards to gain access to

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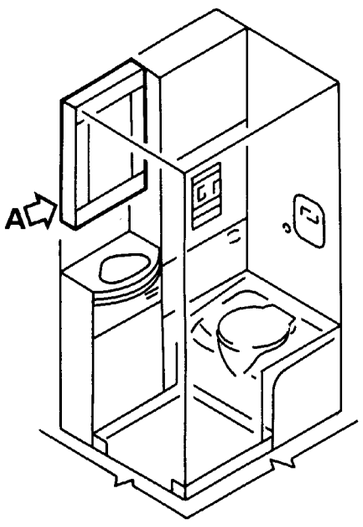
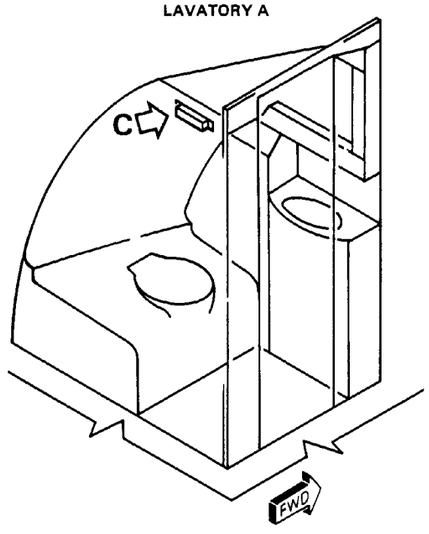
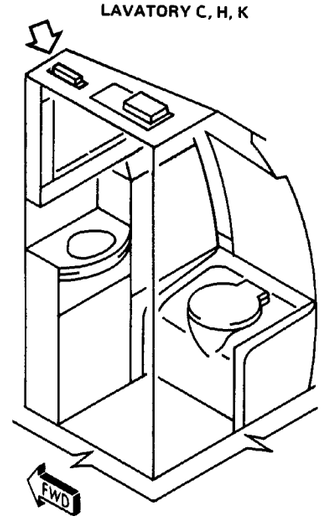
LAVATORY D,E,F,G

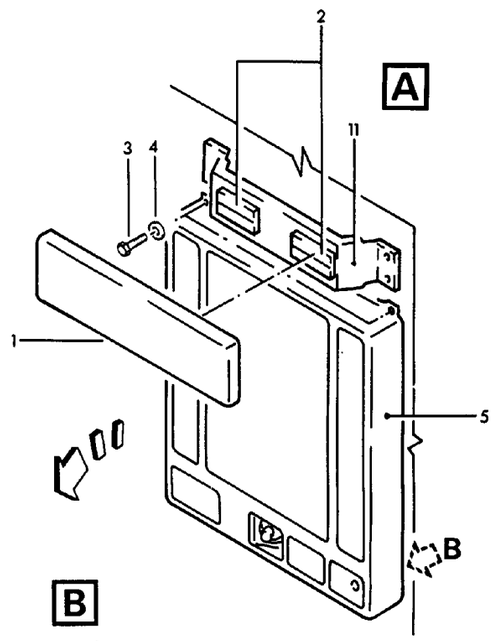


LAVATORY A



LAVATORY C, H, K





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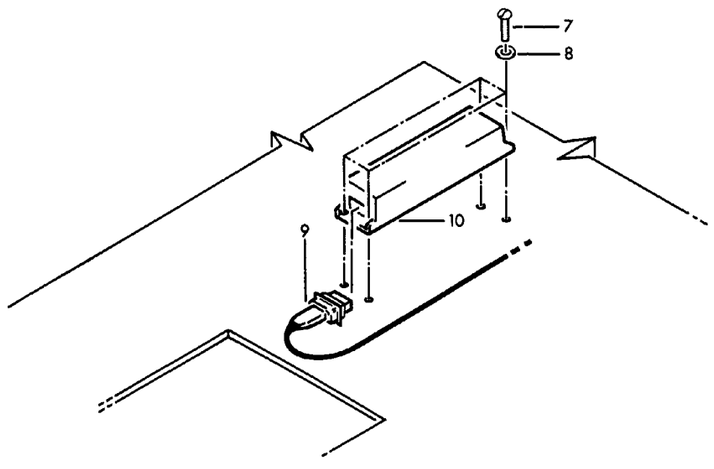

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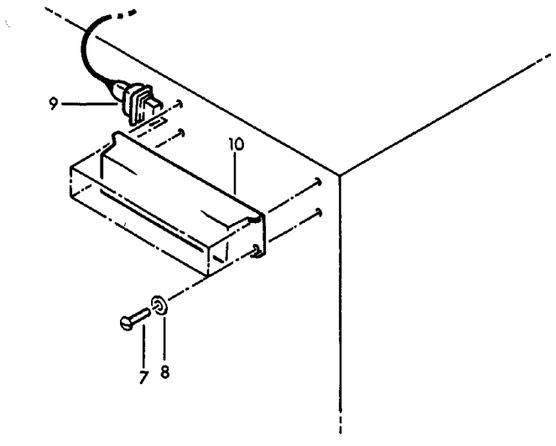

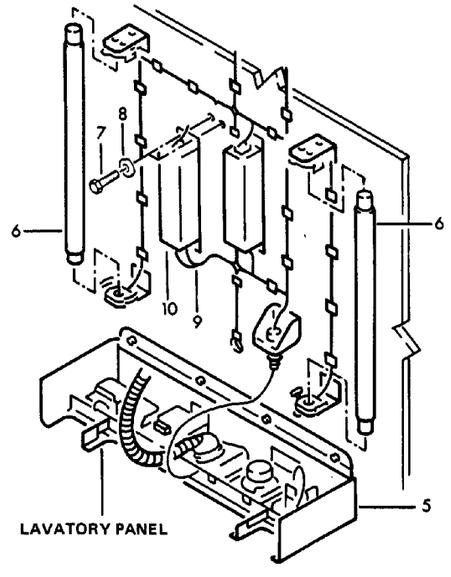

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Ballast Unit
Figure 401

R EFFECTIVITY: 001-100,

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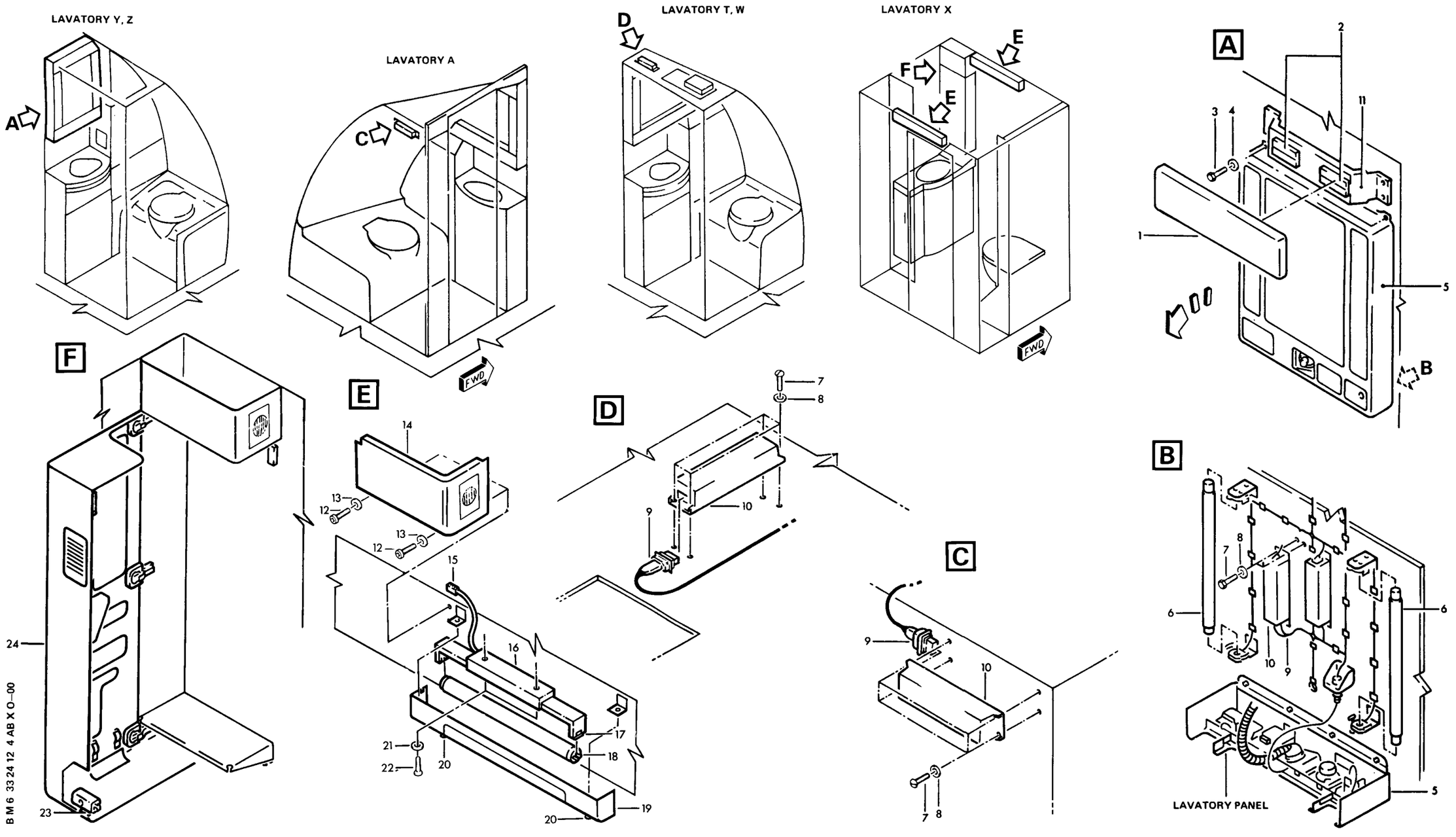


Ballast Unit
Figure 402

the ballast unit.
(c)Disconnect electrical wiring (9) at ballast unit (10).
(d)Remove screws (7), washers (8) and ballast unit (10).
(3)Lavatory D, E, F or G
(a)Remove cover (1) from bracket (11).
NOTE : Cover is attached to bracket by Velcro strips (2).
(b)Remove screws (3) and washers (4) and tilt lavatory panel (5) away from wall.
(c)Remove fluorescent lamp (6).
(d)Disconnect electrical wiring (9) at ballast unit (10).
(e)Remove screws (7), washers (8) and ballast unit (10).

C. Installation
(1)Lavatory A
(a)Install ballast unit (10) and secure with washers (8) and screws (7).
(b)Connect electrical wiring (9) to ballast unit (10).
(c)Close cover above C/A seats at lateral rear-wall of lavatory A.
(2)Lavatory C, K or H
(a)Install ballast unit (10) and secure with washers (8) and screws (7).
(b)Connect electrical wiring (9) to ballast unit (10).
(c)Close and secure ceiling panel.
(d)Remove stepladder.
(3)Lavatory D, E, F or G
(a)Install ballast unit (10), and secure with washers (8) and screws (7).
(b)Connect electrical wiring (9) to ballast unit (10).
(c)Install fluorescent lamp (6).
(d)Raise lavatory panel (5) and secure with washers (4) and screws (3).
(e)Install cover (1) on bracket (11).

R **ON A/C 101-200,

R (1)Lavatory A
R (a)Open cover above C/A seats at lateral rear-wall of lavatory A.
R (b)Disconnect electrical wiring (9) at ballast unit (10).
R (c)Remove screws (7), washers (8) and ballast unit (10).
R (2)Lavatory T or W
R (a)Position stepladder.
R (b)Release fasteners and hinge ceiling panel downwards to gain access to the ballast unit.
R (c)Disconnect electrical wiring (9) at ballast unit (10).
R (d)Remove screws (7), washers (8) and ballast unit (10).
R (3)Lavatory Y or Z
R (a)Remove cover (1) from bracket (11).
R NOTE : Cover is attached to bracket by Velcro strips (2).
R (b)Remove screws (3) and washers (4) and tilt lavatory panel (5) away from wall.
R (c)Remove fluorescent lamp (6).
R (d)Disconnect electrical wiring (9) at ballast unit (10).
R (e)Remove screws (7), washers (8) and ballast unit (10).
R (4)Lavatory X
R (a)Lift the handle (23) to release the latch.

R (b)Open the service cabinet door (24).
R (c)Remove the screws (12), the washers (13) and the cover (14).
R (d)Release the quick release fasteners (20) and remove the fluorescent lamp cover (19).
R (e)Disconnect electrical connector (15).
R (f)Put blanking caps on the disconnected electrical connectors.
R (g)Push the slidebuttons (17) at each end of the lampholder (16) and remove the fluorescent tube (18).
R (h)Remove the screws (22), the washers (21) and the ballast and lampholder (16) from the lavatory structure.

R C. Installation
R (1)Lavatory A
R (a)Install ballast unit (10) and secure with washers (8) and screws (7).
R (b)Connect electrical wiring (9) to ballast unit (10).
R (c)Close cover above C/A seats at lateral rear-wall of lavatory A.
R (2)Lavatory T or W
R (a)Install ballast unit (10) and secure with washers (8) and screws (7).
R (b)Connect electrical wiring (9) to ballast unit (10).
R (c)Close and secure ceiling panel.
R (d)Remove stepladder.
R (3)Lavatory Y or Z
R (a)Install ballast unit (10), and secure with washers (8) and screws (7).
R (b)Connect electrical wiring (9) to ballast unit (10).
R (c)Install fluorescent lamp (6).
R (d)Raise lavatory panel (5) and secure with washers (4) and screws (3).
R (e)Install cover (1) on bracket (11).
R (4)Lavatory X
R (a)Install ballast unit and lampholder (16) to the lavatory structure with washers (21) and the screws (22).
R (b)Install the fluorescent tube (18).
R (c)Remove the blanking caps.
R (d)Connect electrical connector (15).
R (e)Install fluorescent lamp cover (19) with the quick release fasteners (20).
R (f)Install the cover (14) with the washers (13) and the screws (12).
R (g)Close the service cabinet door (24).

R **ON A/C 001-100,

D. Test
(1)Connect electrical ground power unit, and energize aircraft electrical network (Ref. 24-41-00, P. Block 301).
(2)Remove safety clips and tags, and close circuit breaker 1LQ, 11LQ, 1WJ and 11WJ.

ACTION	RESULT
1. On panels 800VU and 811VU: - place toggle switches 2LQ on 800VU and 12LQ on 811VU in ON position.	In all lavatories except F and G: - fluorescent lamps come on with half light intensity (50%).

ACTION	RESULT
	In lavatories G and F: - fluorescent lamps come on with full light intensity (100%).
2. At all lavatories: - close and lock lavatory door.	In all lavatories except F and G: - fluorescent lamps are on with full light intensity (100%). In lavatories F and G: - fluorescent lamps remain on with full light intensity (100%).
3. At all lavatories: - unlock and open lavatory door.	In all lavatories except F and G: - fluorescent lamps are dimmed to half light intensity (50%). In lavatory F and G: - fluorescent lamps remain on with full light intensity (100%).
4. On panels 800VU and 811VU: - place toggle switches 2LQ on 800VU and 12LQ on 811VU in OFF position.	In all lavatories: - all fluorescent lamps go off.

R **ON A/C 101-200,

R D. Test
R (1)Connect electrical ground power unit, and energize aircraft electrical network (Ref. 24-41-00, P. Block 301).
R (2)Remove safety clips and tags, and close circuit breakers 1LQ, 11LQ, 1WJ and 11WJ.

R ACTION	RESULT
R 1. On panels 800VU and 811VU: R - place toggle switches 2LQ on 800VU and 12LQ on 811VU in ON position.	In all lavatories except X: - fluorescent lamps come on with half light intensity (50%). In lavatory X: - fluorescent lamps come on with full light intensity (100%).
R 2. At all lavatories: R - close and lock lavatory door	In all lavatories except X: - fluorescent lamps come on with full light intensity (100%). In lavatory X: - fluorescent lamps remain on with full light intensity (100%).
R At all lavatories: R - unlock and open lavatory door	In all lavatories except X: - fluorescent lamps are dimmed to half light intesity (50%). In lavatory X: - fluorescent lamps remain on with full light intensity (100%).
R 3. On panel 800VU and 811VU: R - place toggle switches 2LQ on 800VU	In all lavatories: - all fluorescent lamps go off.

ACTION	RESULT
and 12LQ on 811VU in OFF position.	

**ON A/C ALL

E. Close-Up
(1)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(2)Remove stepladder.
(3)De-energize aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).

PASSENGER READING LIGHTS - DESCRIPTION AND OPERATION

1. General

R **ON A/C 001-100,

A. Reading lights are installed in the service channels above the seat rows. The system is supplied from the normal AC busbars. The power supply is controlled by a master switch located on panel 818VU. Pushbutton switches provide individual control of the lights.

R **ON A/C 101-200,

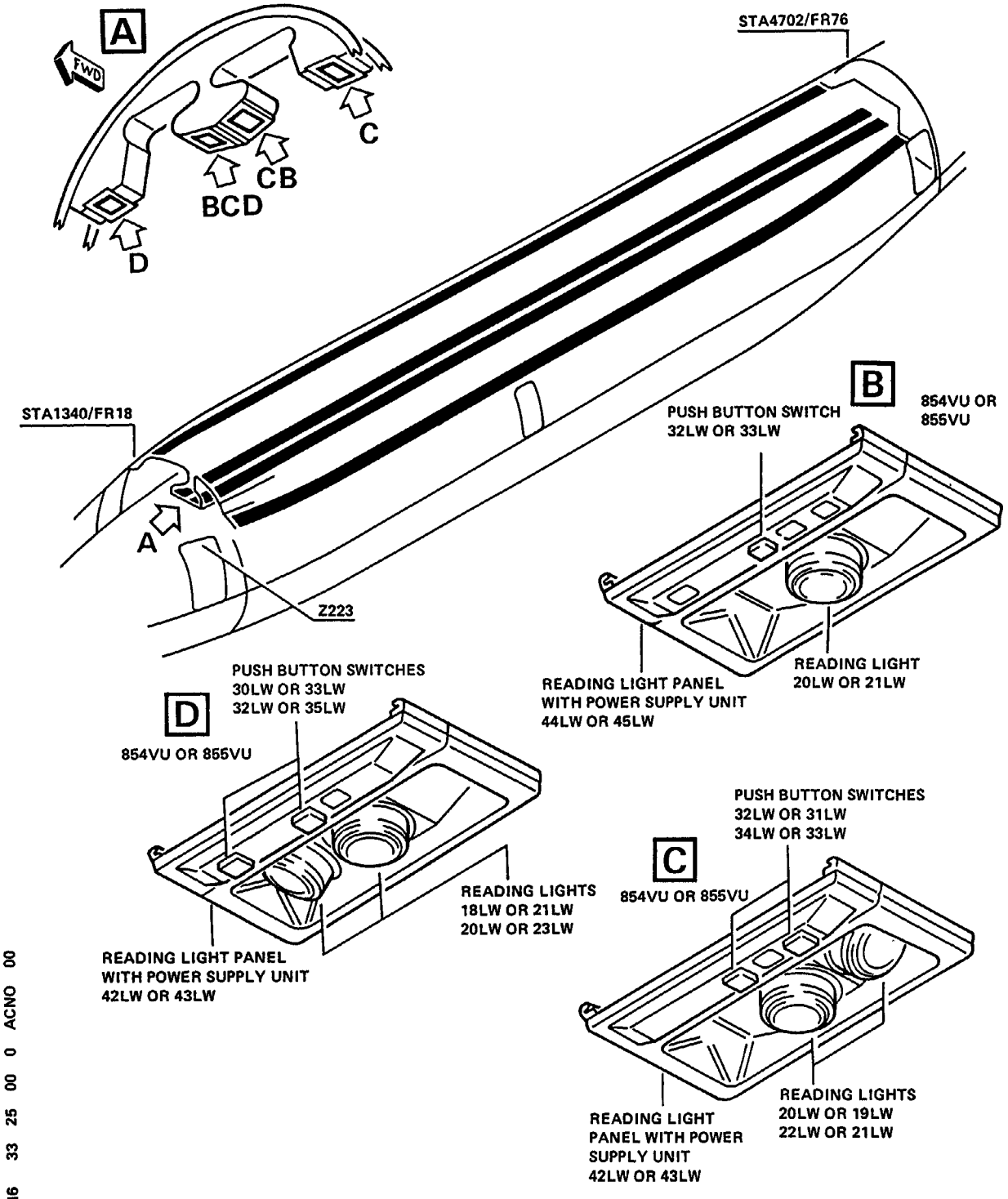
R A. Reading lights are installed in the service channels above the seat rows.
R The passenger reading light system is described in chapter 23-38-00
R (PASSENGER SERVICES SYSTEM).

R **ON A/C 001-100,

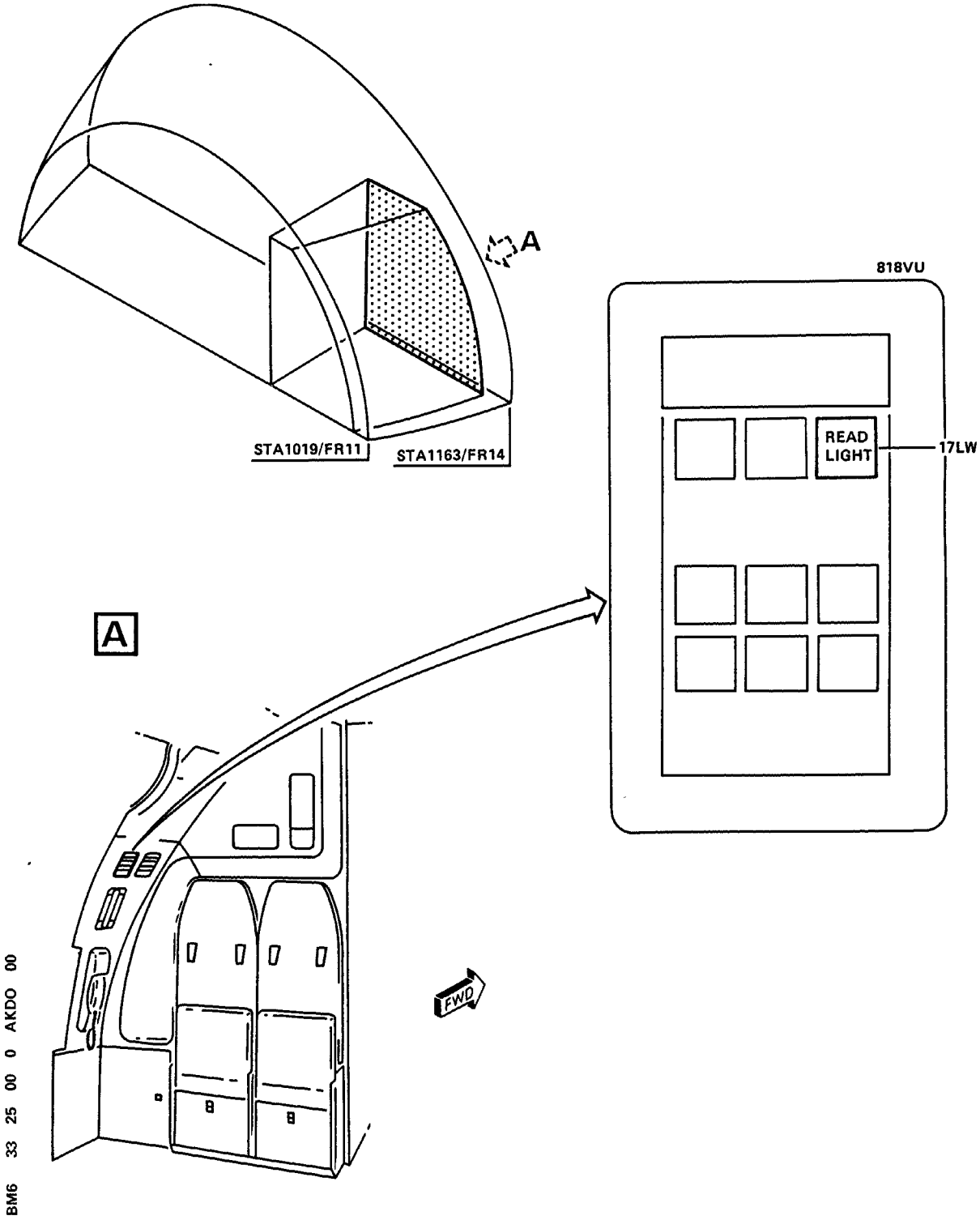
2. Component Location

(Ref. Fig. 001)
(Ref. Fig. 002)

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF.
13LW	RELAY	800VU	220		
14LW	RELAY	800VU	220		
15LW	RELAY	800VU	220		
16LW	RELAY	800VU	220		
17LW	SWITCH-PUSHBUTTON	818VU	220		
	LIGHT-READING		200		33-25-11
	(Ref. corresponding figure)				
	SWITCH-PUSHBUTTON		200		
	(Ref. corresponding figure)				
	POWER SUPPLY UNIT		200		
	(Ref. corresponding figure)				



Passenger Reading Lights - Component Location
Figure 001



Passenger Reading Lights - Component Location
Figure 002

3. Description

A. The passenger reading light panel consists of reading lights and pushbutton switches.

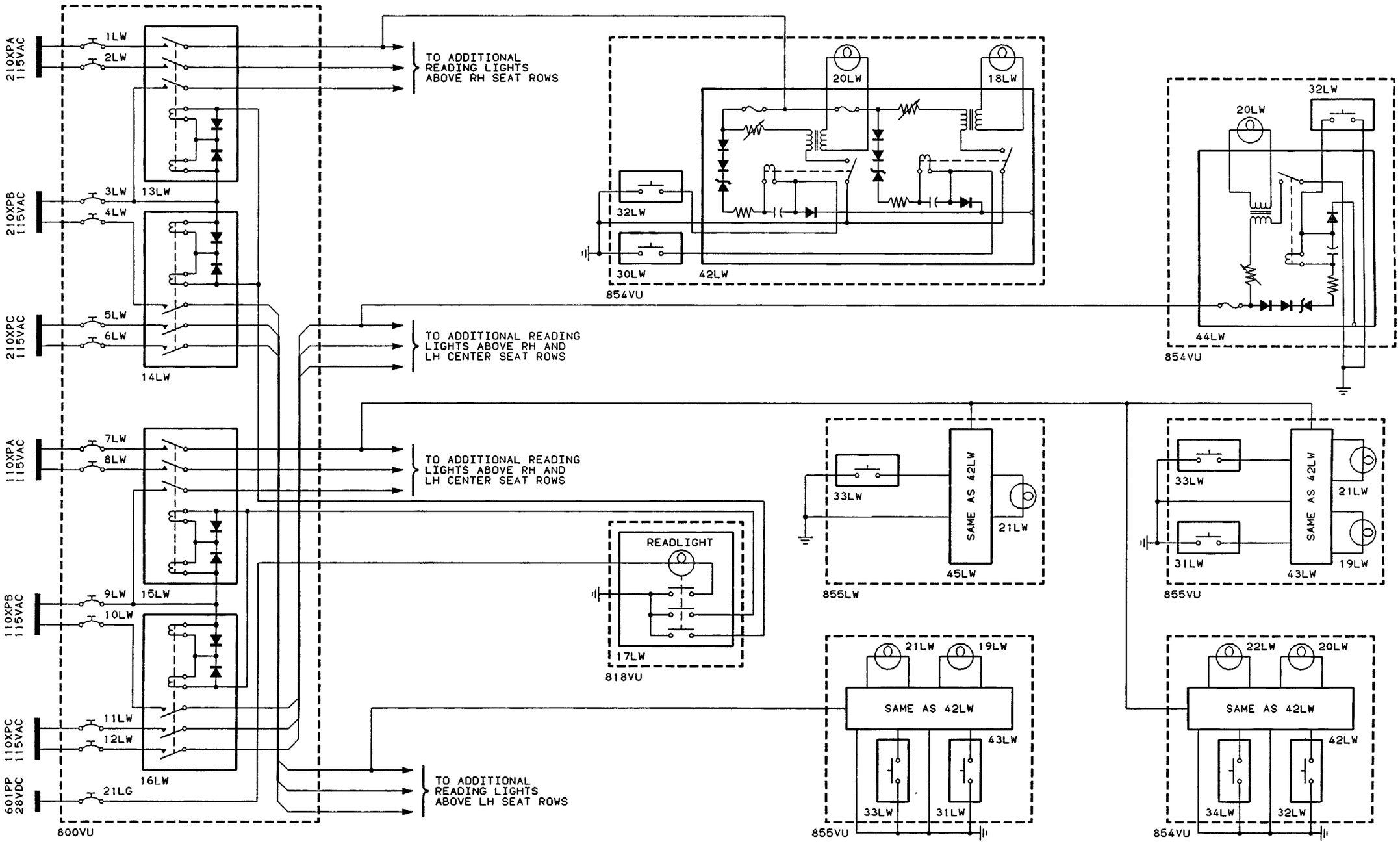
B. Reading lights are controlled by pushbutton switches fitted on the reading light panels.

C. The system is supplied from the 115 V AC busbar. Power is controlled by the pushbutton switch 17LW installed on purser's panel 818VU. The switch is fitted with an integral light supplied from the 28 V DC busbar via circuit breaker 21LG on panel 800VU. Circuit breakers 1LW thru 12LW protect the system and are located on panel 800VU.

D. Distribution relays 13LW thru 16LW switch the voltage to the printed circuit board (PCB) in the power supplied units. Power to the relay coils are supplied via circuit breakers 3LW and 9LW. The PCB consists of a fuse, a resistor, rectifier diodes, a relay and a transformer. The fuse in the primary circuit of the PCB protects the light circuit.

4. Operation

A. 115 V AC is supplied to the distribution relays when the busbars are energized and the circuit breakers are closed.
(1)When pushbutton switch 17LW is switched on, the integral light comes on and the distribution relays are energized to supply 115 V AC to the PCB.
(2)When the reading light switch is pressed, a ground is completed for the PCB relay. The relay contacts close and complete the primary circuit of the PCB step-down transformer. The transformer steps the 115 V AC down to 6V AC and the individual reading light comes on.
(Ref. Fig. 003)



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Passenger Reading Lights - Schematic
Figure 003

1. Operational Test

A. Equipment and Materials

ITEM	DESIGNATION
(1)	Electrical Ground Power Unit - 3-Phase, 115/200 V, 400 Hz
Referenced Procedure - 24-41-00, P. Block 301	AC External Power Control

B. Procedure

(1)Job Set-Up

(a)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).

(b)Make certain that electronics racks ventilation is correct.

(c)Make certain that the following circuit breakers are closed:

PANEL	SERVICE	IDENT.	LOCATION
800VU	READING LIGHT	1LW	C 1
800VU	READING LIGHT	2LW	C 2
800VU	READING LIGHT	3LW	C 3
800VU	READING LIGHT	4LW	C 4
800VU	READING LIGHT	5LW	C 5
800VU	READING LIGHT	6LW	C 6
800VU	READING LIGHT	7LW	C 7
800VU	READING LIGHT	8LW	C 8
800VU	READING LIGHT	9LW	C 9
800VU	READING LIGHT	10LW	C10
800VU	READING LIGHT	11LW	C11
800VU	READING LIGHT	12LW	C12
800VU	CABIN LIGHT CONTR./ENTRY	21LG	A10

(2)Test

ACTION	RESULT
1. On panel 818VU: - press pushbutton switch 17LW.	On panel 818VU: - indicator light in pushbutton switch 17LW comes on.
2. Passenger compartment: - press all reading light pushbutton switches throughout the cabin.	Passenger compartment: - all reading lights come on.
3. Passenger compartment: - press all reading light push-button switches again.	Passenger compartment: - all reading lights go off.
4. On panel 818VU: - press pushbutton switch 17LW.	On panel 818VU: - indicator light in switch 17LW goes off.

(3)Close-Up
(a)De-energize the aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).

1. Equipment and Materials

ITEM	DESIGNATION
A.	Electrical Ground Power Unit - 3-Phase, 115/200 V, 400 Hz
R B. 8PE004363-00 or 8PE004363-10	Adjusting Device

Referenced Procedures

- 25-25-00, P. Block 1	Passenger Service Units
- 24-41-00, P. Block 301	AC External Power Control

**ON A/C 001-100,

2. Procedure

A. Job Set-Up
(1)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
800VU	READING LIGHT	3LW	C3
800VU	READING LIGHT	9LW	C9

**ON A/C 101-200,

2. Procedure

A. Job Set-Up
(1)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
800VU	READING LIGHT PASSENGER	1LW	C 1
800VU	READING LIGHT PASSENGER	2LW	C 2
800VU	READING LIGHT PASSENGER	3LW	C 3
800VU	READING LIGHT PASSENGER	4LW	C 4
800VU	READING LIGHT PASSENGER	5LW	C 5
800VU	READING LIGHT PASSENGER	6LW	C 6
800VU	READING LIGHT PASSENGER	7LW	C 7
800VU	READING LIGHT PASSENGER	8LW	C 8
800VU	READING LIGHT PASSENGER	9LW	C 9
800VU	READING LIGHT PASSENGER	10LW	C10
800VU	READING LIGHT PASSENGER	11LW	C11
800VU	READING LIGHT PASSENGER	12LW	C12
800VU	PES/PSS	20MK	D 1

PANEL	SERVICE	IDENT.	LOCATION
800VU	PES/PSS	21MK	D 2
800VU	PES/PSS	22MK	D 3

**ON A/C ALL

(Ref. Fig. 401)

**ON A/C 001-100,

(2)Disengage one side of utility panel (Ref. 25-25-00, P. Block 1) and lower to servicing position.

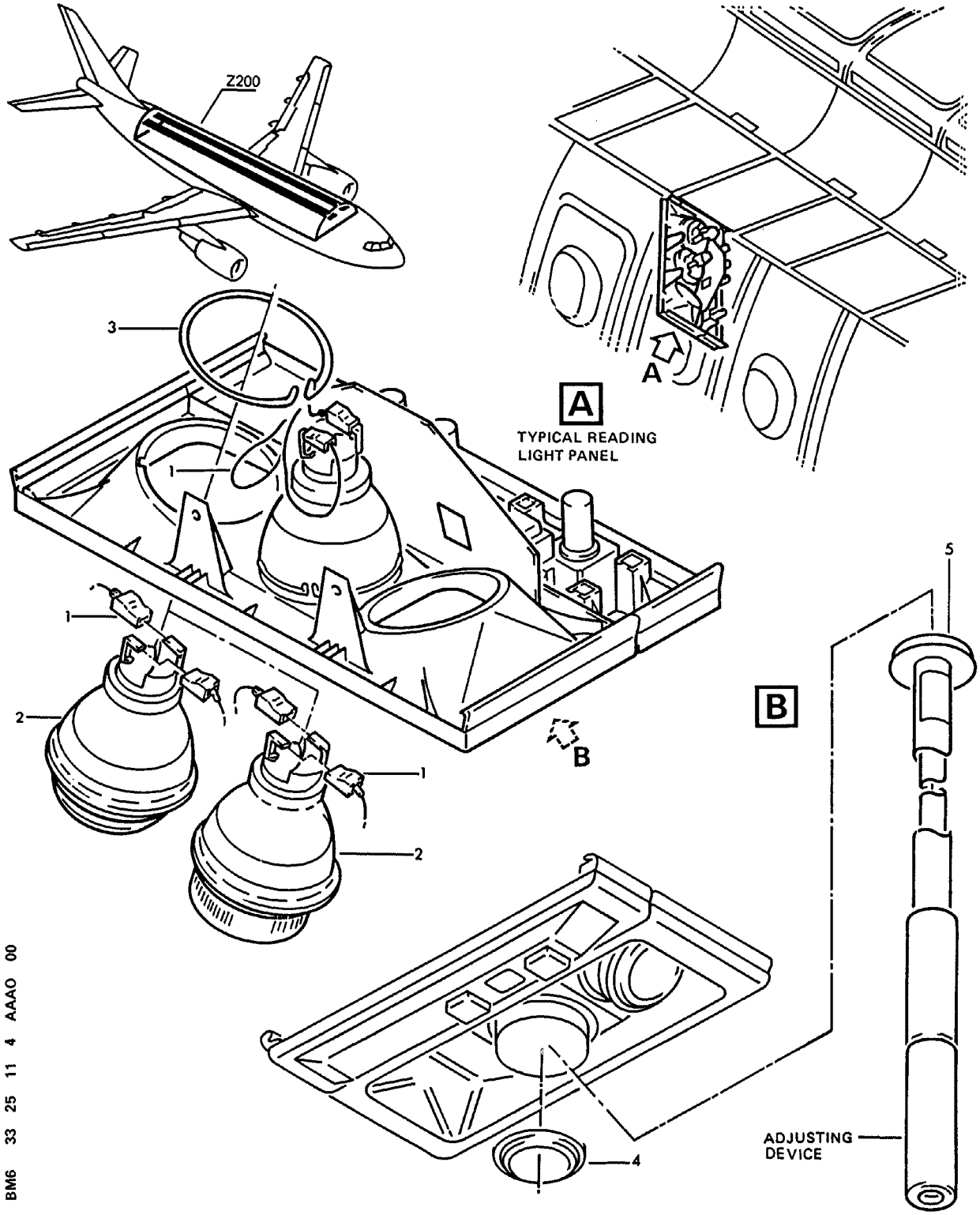
B. Removal
(1)Identify and disconnect two wires (1) from passenger reading light (2).
(2)Remove snap ring (3).
(3)Remove passenger reading light (2).
NOTE : Light is not passenger adjustable.

C. Installation
(1)Install passenger reading light (2).
(2)Install snap ring (3).
(3)Identify and connect two wires (1) to passenger reading light (2).
(4)Install utility panel (Ref. 25-25-00, P. Block 1).
(5)Connect electrical ground power unit and energize aircraft electrical network (Ref. 24-41-00, P. Block 301).
(6)Remove safety clips and tags and close the relevant circuit breaker on panel 800VU.
(7)Remove lens (4).
R (8)Using adjusting device (5) P/N 8PE004363-00 or P/N 8PE004363-10,
R interlock in housing assembly.
(9)Press pushbutton switch on panel 818VU and the relevant reading light switch.
(10)Direct light beam to front edge of relevant seat.
(11)Press relevant pushbutton switches again.
(12)Remove adjusting device (5).
(13)Install lens (4).

**ON A/C 101-200,

(2)Disengage one side of utility panel (Ref. 25-25-00, P. Block 1) and lower to servicing position.

B. Removal
(1)Identify and disconnect two wires (1) from passenger reading light (2).
(2)Remove snap ring (3).
(3)Remove passenger reading light (2).
NOTE : Light is not passenger adjustable.



Passenger Reading Lights
Figure 401

C. Installation
(1)Install passenger reading light (2).
(2)Install snap ring (3).
(3)Identify and connect two wires (1) to passenger reading light (2).
(4)Install utility panel (Ref. 25-25-00, P. Block 1).
(5)Connect electrical ground power unit and energize aircraft electrical network (Ref. 24-41-00, P. Block 301).
(6)Remove safety clips and tags and close the relevant circuit breaker on panel 800VU.
(7)Remove lens (4).
R (8)Using adjusting device (5) P/N 8PE004363-00 or P/N 8PE004363-10,
R interlock in housing assembly.
(9)Push reading light switch in seat armrest and the relevant reading light comes on.
(10)Direct light beam to front edge of relevant seat.
(11)Push relevant reading light switch again.
(12)Remove adjusting device (5).
(13)Install lens (4).

**ON A/C ALL

D. Close-Up
(1)De-energize the aircraft electrical network and disconnect the electrical ground power unit (Ref. 24-41-00, P. Block 301).
(2)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.

PASSENGER LIGHTED SIGNS - DESCRIPTION AND OPERATION

1. General

Passenger lighted signs consist of the following information signs:

A. **NO SMOKING/FASTEN SEAT BELT,** installed in the service channels above the seat rows and in the galley areas.

B. **RETURN TO SEAT,** installed in the passenger service units in the lavatories.

C. **LAVATORY/OCCUPIED,** installed in the vicinity of the lavatories in the passenger compartment. An **OCCUPIED** annunciator is also installed in the flight compartment.

2. Component Location

R **ON A/C 001-100,

(Ref. Fig. 001)

R **ON A/C 101-200,

R (Ref. Fig. 002)

R **ON A/C 001-100,

(Ref. Fig. 003)

R **ON A/C 101-200,

R (Ref. Fig. 004)

R **ON A/C 001-100,

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF.
4WJ	RELAY	801VU	221		
5WJ	MICROSWITCH	801VU	221		
12WJ	MICROSWITCH	812VU	262		
13WJ	SIGN LAVATORY/OCCUPIED		250		33-26-31
14WJ	RELAY	814VU	262		
15WJ	RELAY	815VU	261		
16WJ	MICROSWITCH	813VU	261		
17WJ	MICROSWITCH	814VU	262		
18WJ	MICROSWITCH	815VU	261		
19WJ	RELAY	812VU	262		
20WJ	RELAY	813VU	261		
32WJ	SWITCH NO SMOKING	423VU	212		
33WJ	SWITCH SEAT BELTS	423VU	212		
36WJ1	SIGN RETURN TO SEAT	817VU1	264		33-26-21

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF.
36WJ2	SIGN RETURN TO SEAT	817VU2	264		33-26-21
36WJ5	SIGN RETURN TO SEAT	817VU5			33-26-21
36WJ8	SIGN RETURN TO SEAT	817VU8	223		33-26-21
37WJ1	SIGN RETURN TO SEAT	816VU1	264		33-26-21
37WJ2	SIGN RETURN TO SEAT	816VU2	264		33-26-21
37WJ4	SIGN RETURN TO SEAT	816VU4	231		33-26-21
37WJ7	SIGN RETURN TO SEAT	816VU7	232		33-26-21
38WJ	RELAY	107VU	122		
	SIGN NO SMOKING/FASTEN SEAT BELT (REF. CORRESPONDING FIGURE)		200		33-26-11
45WJ	RELAY	107VU	122		
50WJ	SIGN LAVATORY/OCCUPIED		232		33-26-31
51WJ	SIGN LAVATORY/OCCUPIED		233		33-26-31
54WJ	SIGN LAVATORY/OCCUPIED		232		33-26-31
55WJ	SIGN LAVATORY/OCCUPIED		231		33-26-31
60WJ	RELAY	107VU	122		
61WJ	RELAY	107VU	122		
70WJ	MICROSWITCH	1862VU	231		
71WJ	MICROSWITCH	879VU	232		
87WJ	MICROSWITCH	763VU	222		
89WJ	ANNUNCIATOR	120VU	122		

R **ON A/C 101-200,

R FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF.
R 4WJ	RELAY	801VU	221		
R 5WJ	MICROSWITCH	801VU	221		
R 32WJ	SWITCH-NO SMOKING	423VU	212		
R 33WJ	SWITCH-SEAT BELTS	423VU	212		
R 36WJ7	RETURN TO SEAT SIGN-FIXTURE	817VU	241		33-26-21
R 36WJ8	RETURN TO SEAT SIGN-FIXTURE	817VU	221		33-26-21
R 36WJ10	RETURN TO SEAT SIGN-FIXTURE	817VU	251		33-26-21
R	RETURN TO SEAT SIGN-FIXTURE		250		33-26-21
R 37WJ8	RETURN TO SEAT SIGN-FIXTURE	816VU	242		33-26-21
R 37WJ10	RETURN TO SEAT SIGN-FIXTURE	817VU	252		33-26-21
R 38WJ	RELAY	107VU	122		
R	NO SMOKING/FASTEN SEAT BELT SIGN-FIXTURE		200		33-26-11
R	(REF. CORRESPONDING FIGURE)				
R 45WJ	RELAY	107VU	122		
R 50WJ	LAVATORY/OCCUPIED SIGN-FIXTURE		232		33-26-31
R 51WJ	LAVATORY/OCCUPIED SIGN-FIXTURE		233		33-26-31
R 52WJ	LAVATORY/OCCUPIED SIGN-FIXTURE		252		33-26-31
R 53WJ	LAVATORY/OCCUPIED SIGN-FIXTURE		253		33-26-31
R 57WJ	LAVATORY/OCCUPIED SIGN-FIXTURE		233		33-26-31

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF.
58WJ	LAVATORY/OCCUPIED SIGN-FIXTURE		232		33-26-31
60WJ	RELAY	107VU	122		
61WJ	RELAY	107VU	122		
73WJ	RELAY	1864VU	252		
74WJ	MICROSWITCH	1864VU	252		
75WJ	RELAY	1865VU	251		
76WJ	MICROSWITCH	1865VU	251		
82WJ	MICROSWITCH	1871VU	242		
83WJ	MICROSWITCH	1870VU	241		
89WJ	ANNUNCIATOR	120VU	122		
	MICROSWITCH		250		

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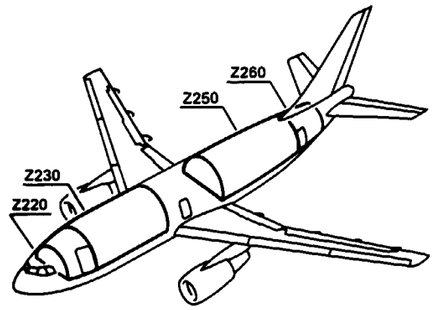

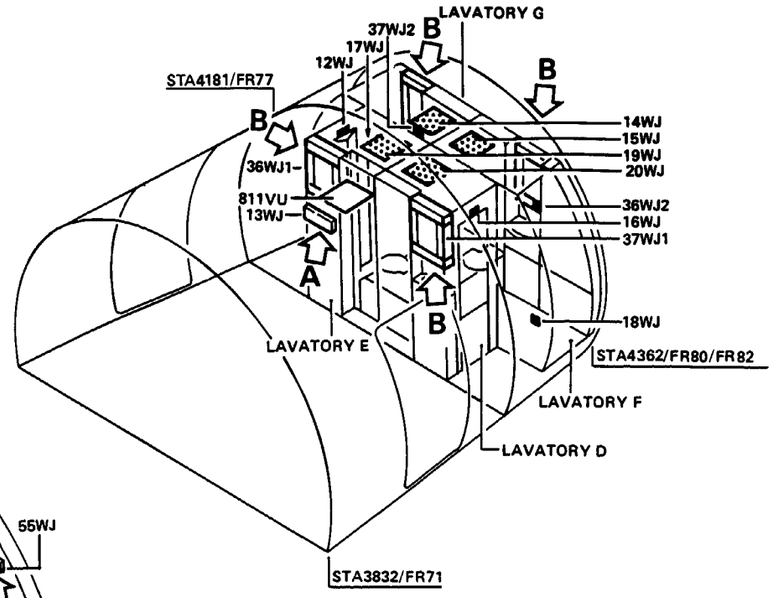

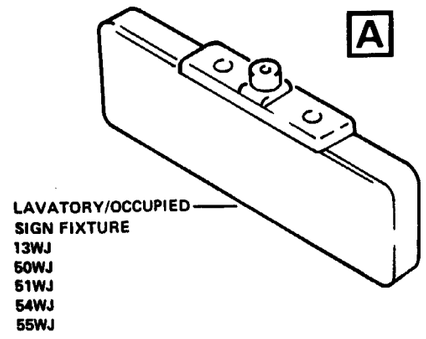

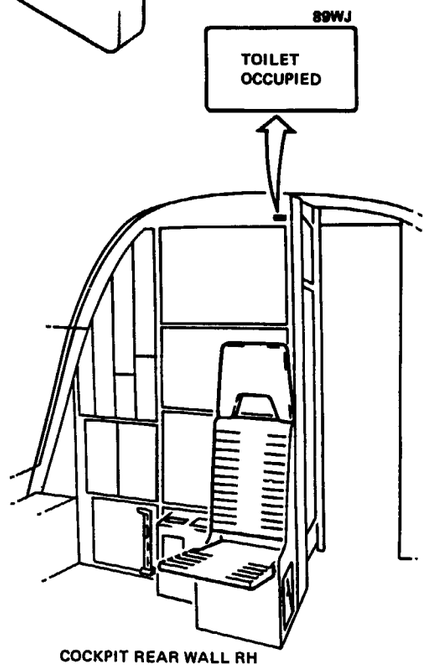

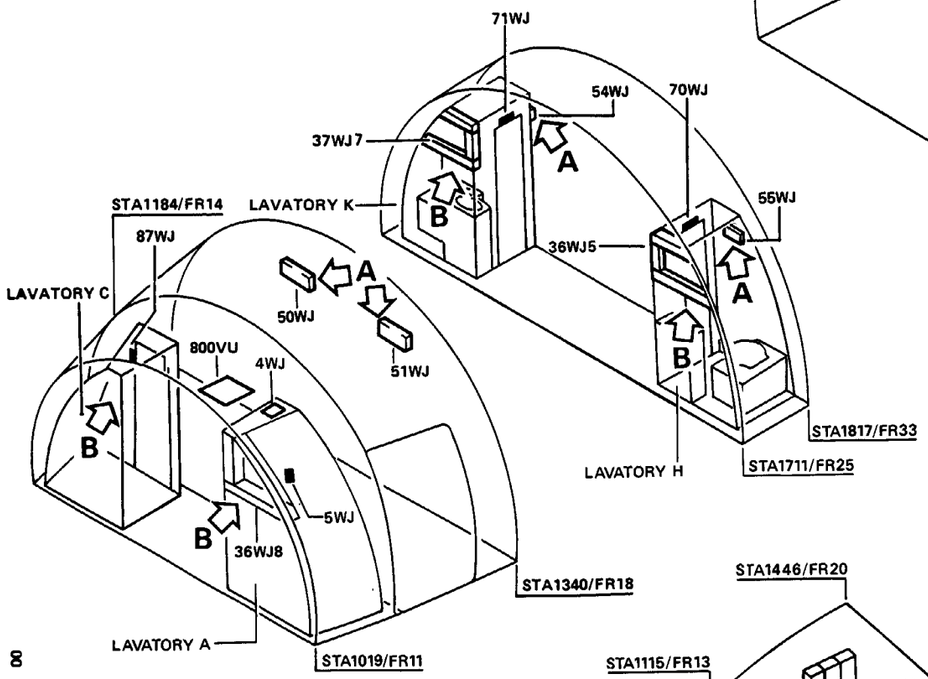

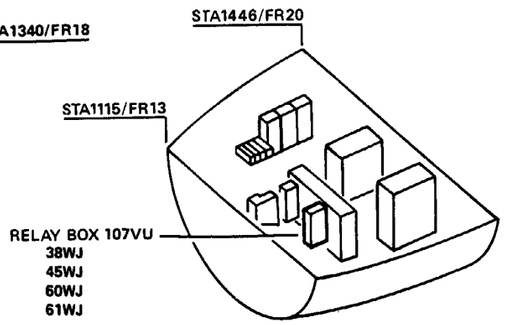

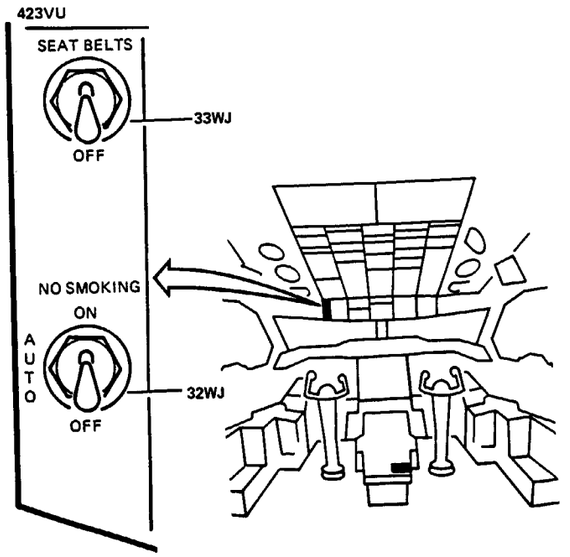

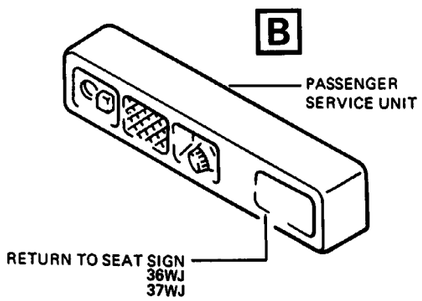

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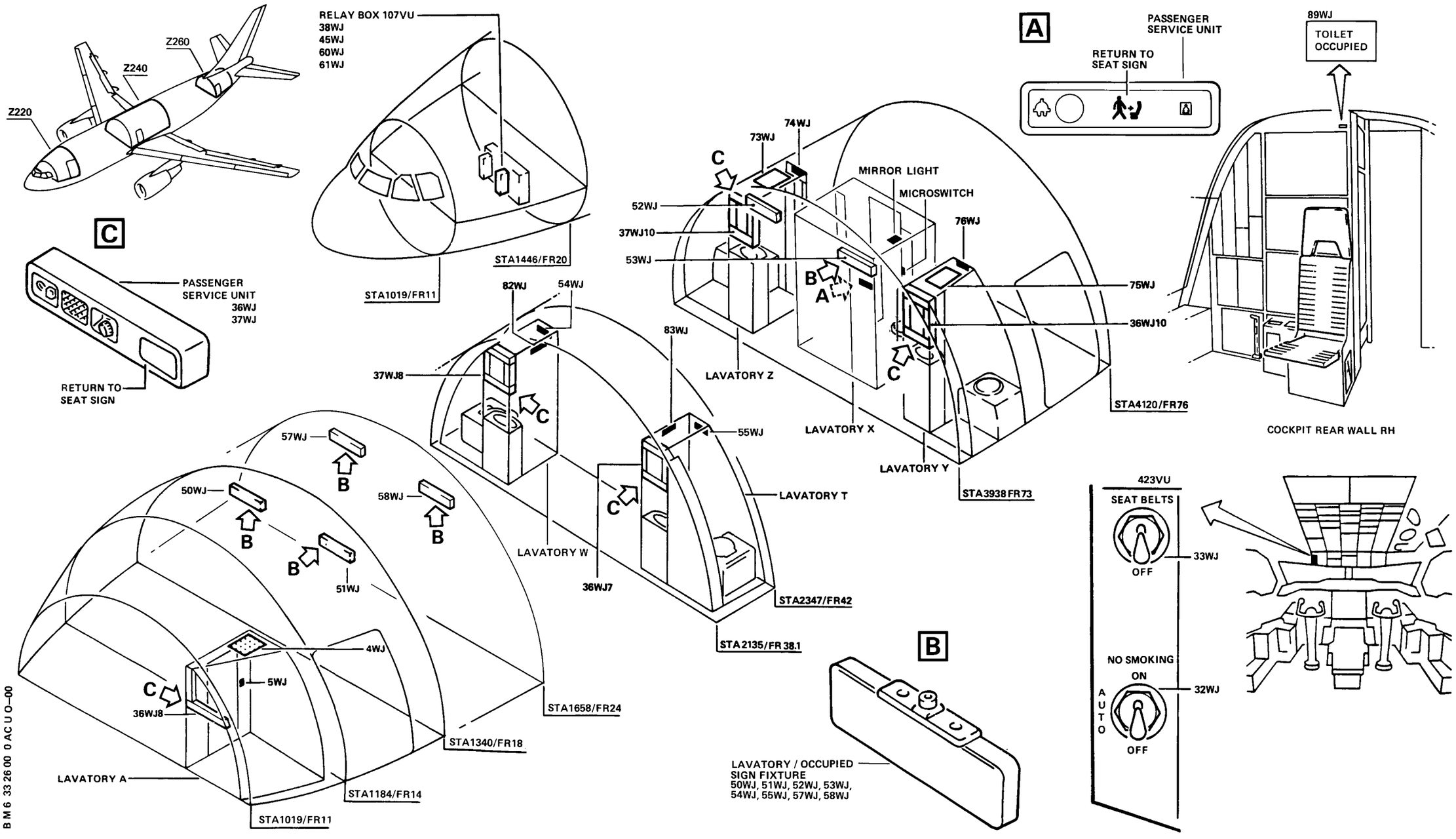
Component Locations
Figure 001



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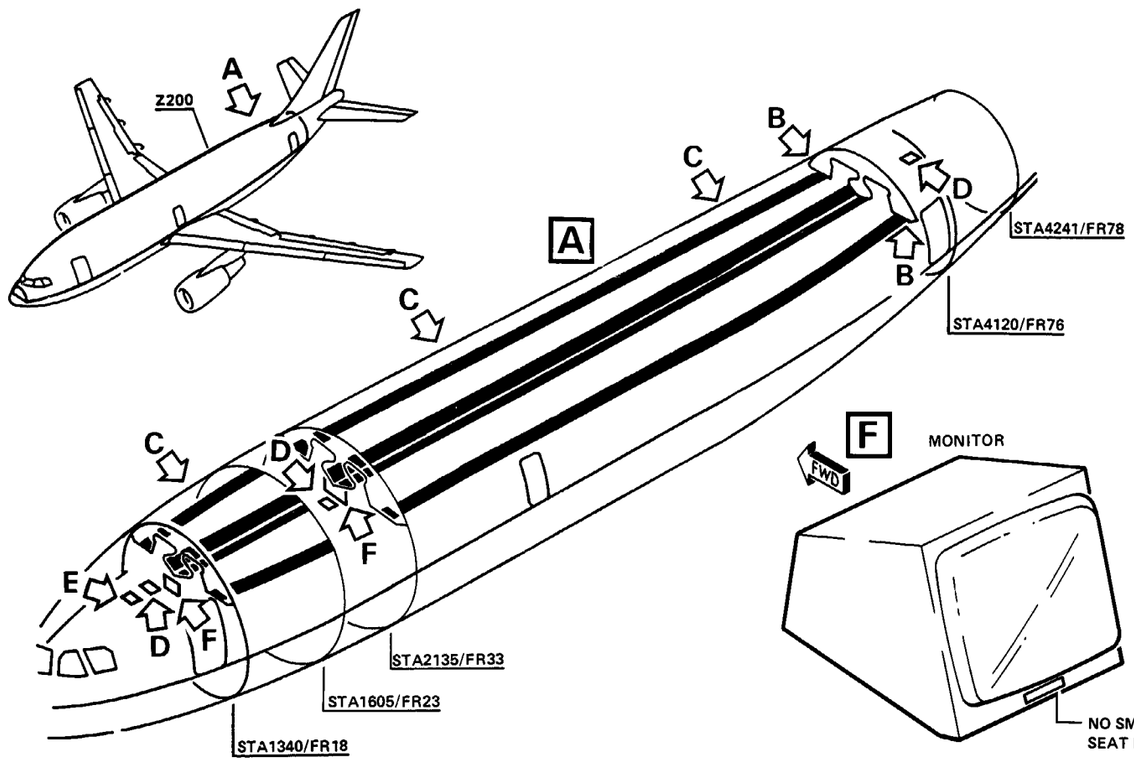
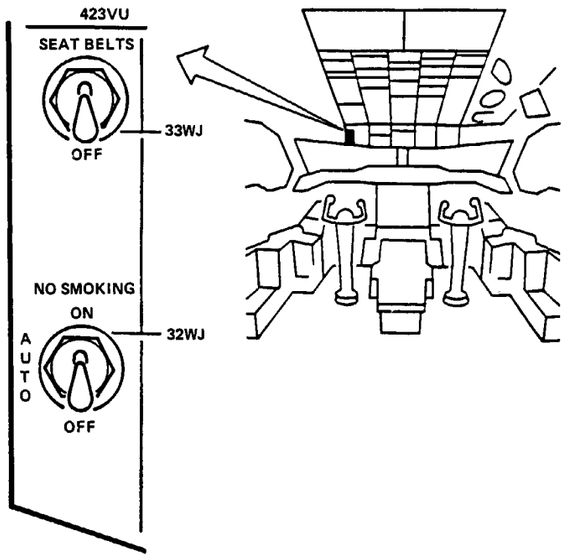
R Component Locations
Figure 002





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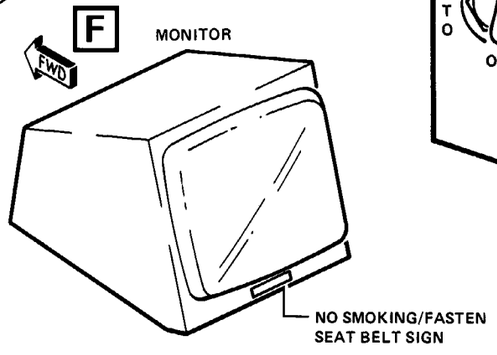

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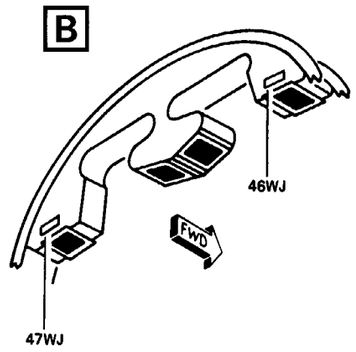

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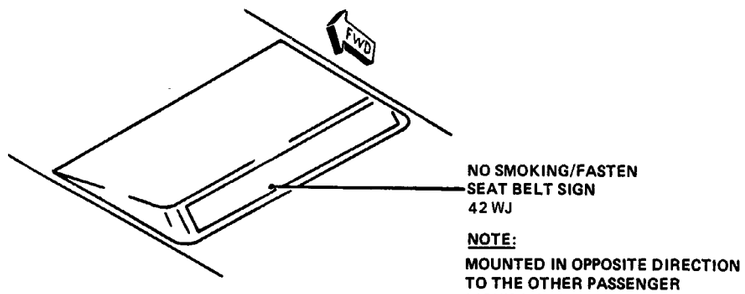

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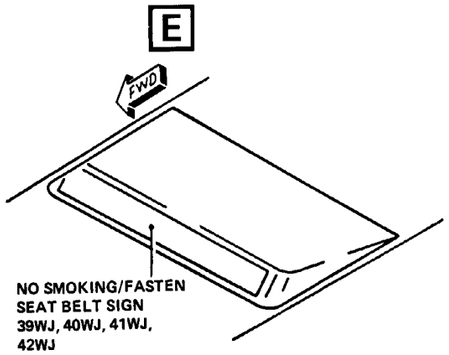

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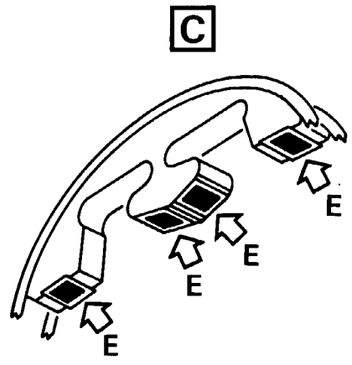

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Component Locations
Figure 003

R EFFECTIVITY: 001-100,

PIA

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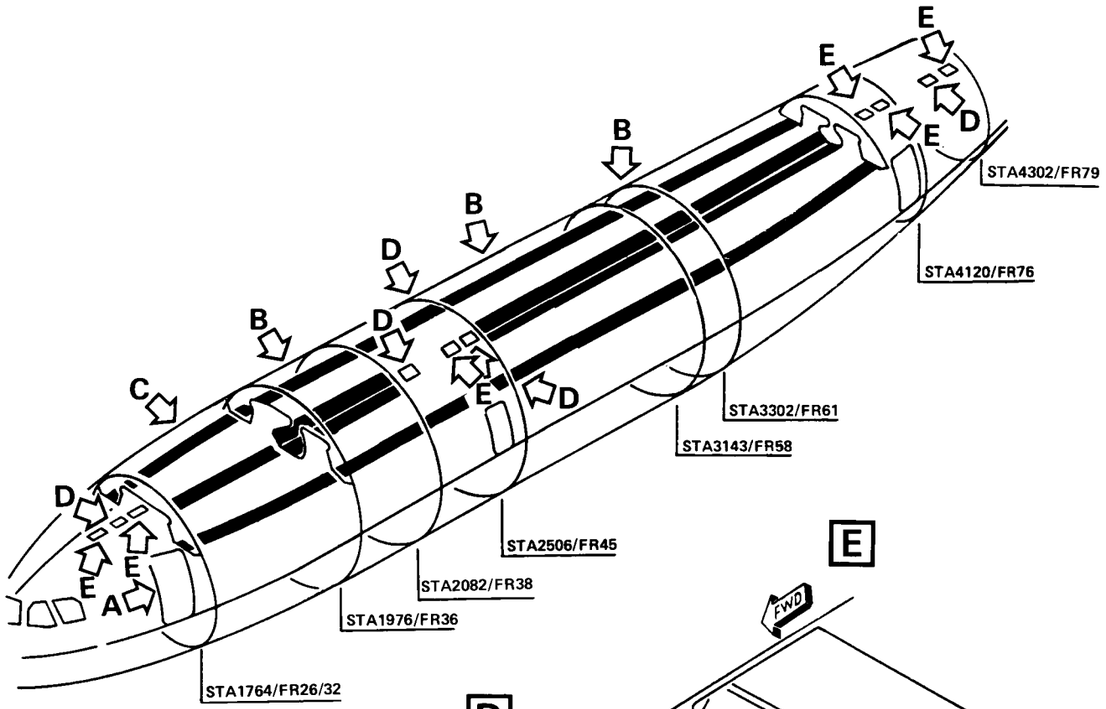
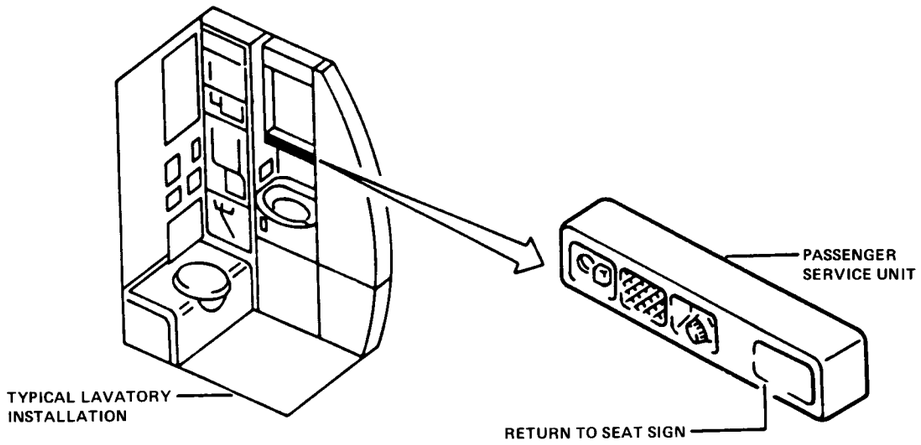
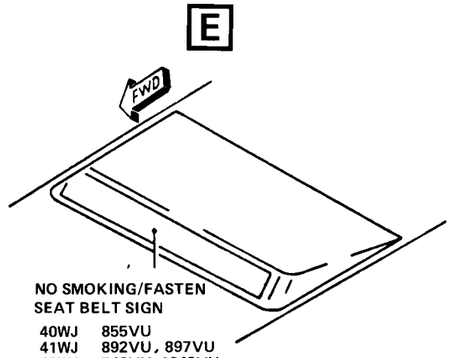
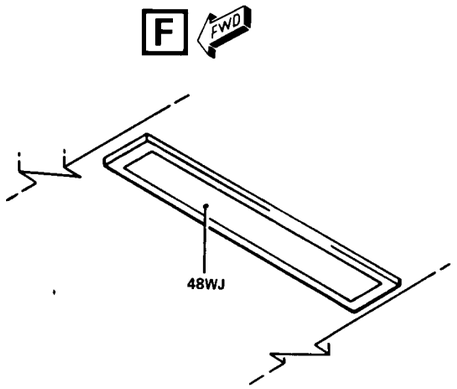
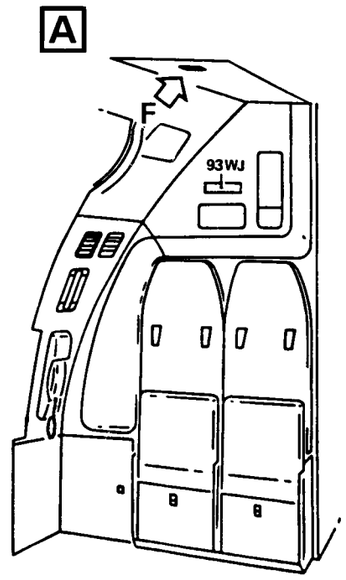
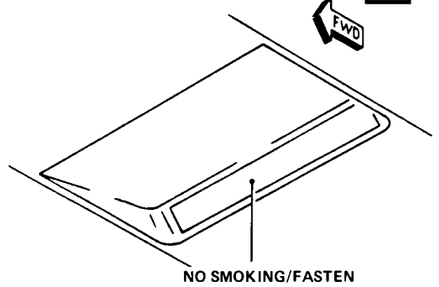






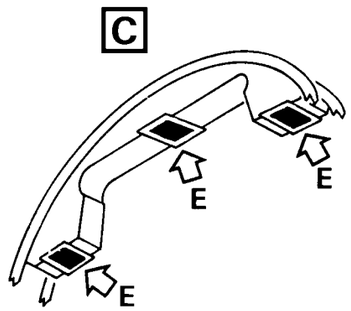


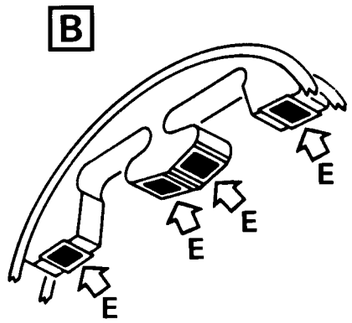




NOTE: MOUNTED IN OPPOSITE DIRECTION TO THE OTHER PASSENGER LIGHTED SIGNS

41WJ 897VU
42WJ 742VU
158WJ 1354VU
159WJ 1342VU





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Component Locations
Figure 004

R **ON A/C 001-100,

3. Description

A. The Passenger Lighted Signs System consists of:
(1) NO SMOKING Signs - these signs are installed in the service channel above the seats and in the galley areas. The signs come on when the control switch (32WJ), on overhead panel 423VU in the flight compartment, is placed to ON, or automatically when in the AUTO position and the landing gear is extended. A low-tone chime and an announcement are broadcast over the PA system loudspeakers when the signs are switched on. To enable an announcement to be made the system must be in operation. In the event of rapid decompression the signs come on irrespective of the control switch position.
(2) FASTEN SEAT BELT Signs - these signs are installed in the service channel above the seats and in the galley areas. They come on when the control switch (33WJ), on overhead panel 423VU in the flight compartment, is placed to the SEAT BELT position. A low-tone chime and an announcement are broadcast over the PA system loudspeakers when the signs are switched on. To enable an announcement to the made the system must be in operation. In the event of rapid decompression the signs come on irrespective of the control switch position.
(3) RETURN TO SEAT Signs - these signs are installed in each lavatory and come on when the FASTEN SEAT BELT control switch (33WJ) is placed to the SEAT BELT position. A low-tone chime and an announcement are broadcast over the PA system loudspeakers when the signs are switched on. To enable an announcement to be made the system must be in operation.
(4) LAVATORY/OCCUPIED Signs - these signs are installed adjacent to the lavatories. The signs are illuminated when the associated circuit breakers are closed. A OCCUPIED annunciator is installed at the rear wall of the flight compartment.
(5) A toggle switch NO SMOKING (32WJ), installed on overhead panel 423VU in the flight compartment, controls the NO SMOKING signs. The switch positions are identified ON-AUTO-OFF.
(6) A toggle switch SEAT BELT (33WJ), installed on overhead panel 423VU in the flight compartment, controls the FASTEN SEAT BELT signs and RETURN TO SEAT signs. The switch positions are identified SEAT BELT - OFF.

R **ON A/C 101-200,

R 3. Description

R NOTE: The announcement is only audible if the respective announcement
R reproducer is installed. (Ref 23-32-00)

R A. The Passenger Lighted Signs System consists of:
R (1) NO SMOKING Signs - these signs are installed in the service channel
R above the seats and in the galley areas. The signs come on when the
R control switch (32WJ), on overhead panel 423VU in the flight compart-
R ment, is placed to ON, or automatically when in the AUTO position and

R the landing gear is extended. A low-tone chime and an announcement
R are broadcast over the PA system loudspeakers when the signs are swit-
R ched on. To enable an announcement to be made the system must be in
R operation. In the event of rapid decompression the signs come on irre-
R spective of the control switch position.
R (2)FASTEN SEAT BELT Signs - these signs are installed in the service
R channel above the seats and in the galley areas. They come on
R when the control switch (33WJ), on overhead panel 423VU in the flight
R compartment, is placed to the SEAT BELT position. A low-tone chime and
R an announcement are broadcast over the PA system loudspeakers when the
R signs are switched on. To enable an announcement to the made the system
R must be in operation. In the event of rapid decompression the signs come
R on irrespective of the control switch position.
R (3)RETURN TO SEAT Signs - these signs are installed in each lavatory
R and come on when the FASTEN SEAT BELT control switch (33WJ) is placed to
R the SEAT BELT position. A low-tone chime and an announcement are broad-
R cast over the PA system loudspeakers when the signs are switched on. To
R enable an announcement to be made the system must be in operation.
R (4)LAVATORY/OCCUPIED Signs - these signs are installed adjacent to the lava-
R tories. The signs are illuminated when the associated circuit breakers
R are closed. A OCCUPIED annunciator is installed at the rear wall of the
R flight compartment.
R (5)A toggle switch NO SMOKING (32WJ), installed on overhead panel 423VU in
R the flight compartment, controls the NO SMOKING signs. The switch posi-
R tions are identified ON-AUTO-OFF.
R (6)A toggle switch SEAT BELT (33WJ), installed on overhead panel 423VU in
R the flight compartment, controls the FASTEN SEAT BELT signs and RETURN
R TO SEAT signs. The switch positions are identified SEAT BELT - OFF.

R **ON A/C 001-100,

4. Operation (Ref. Fig. 005)

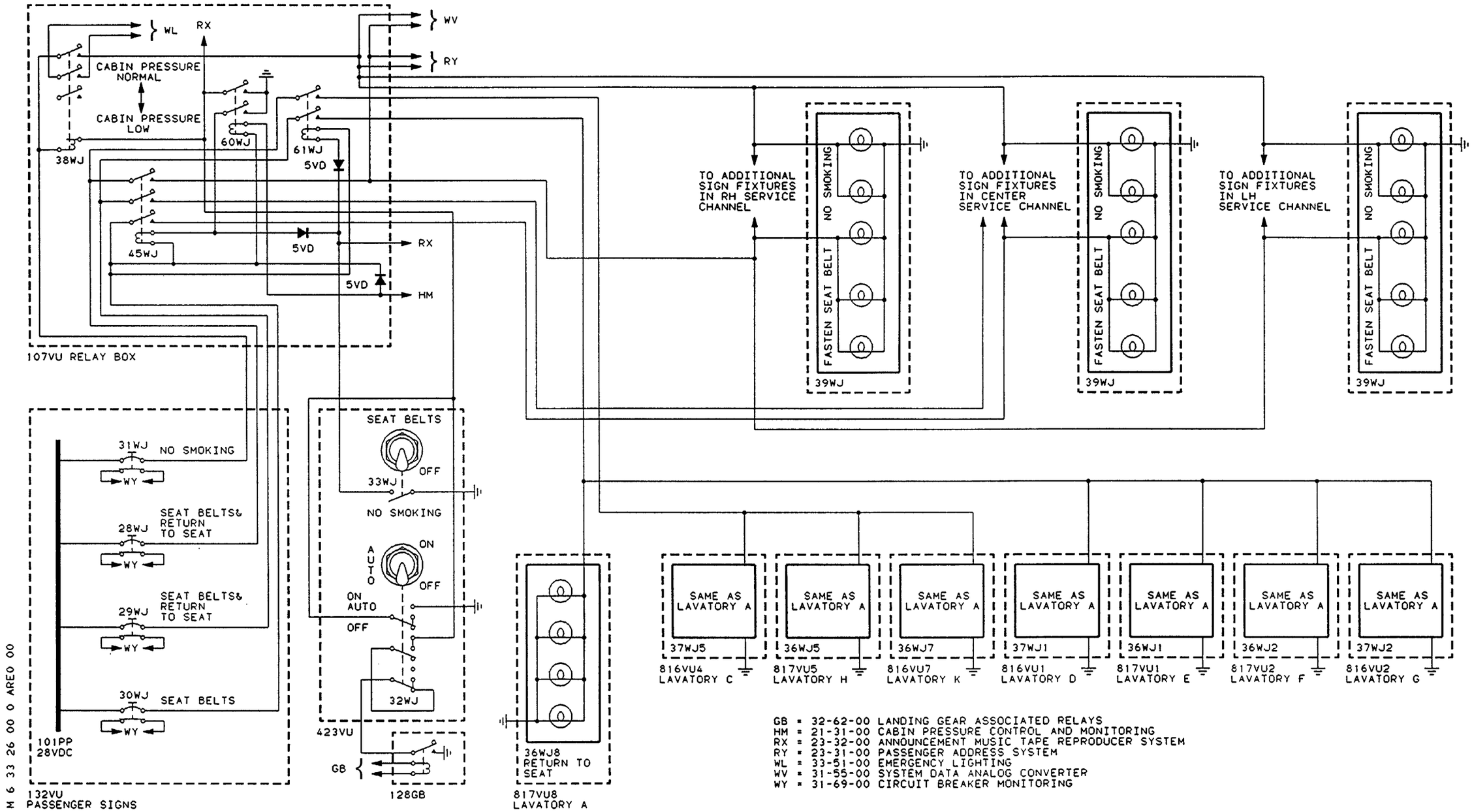
R **ON A/C 101-200,

R 4. Operation (Ref. Fig. 006)

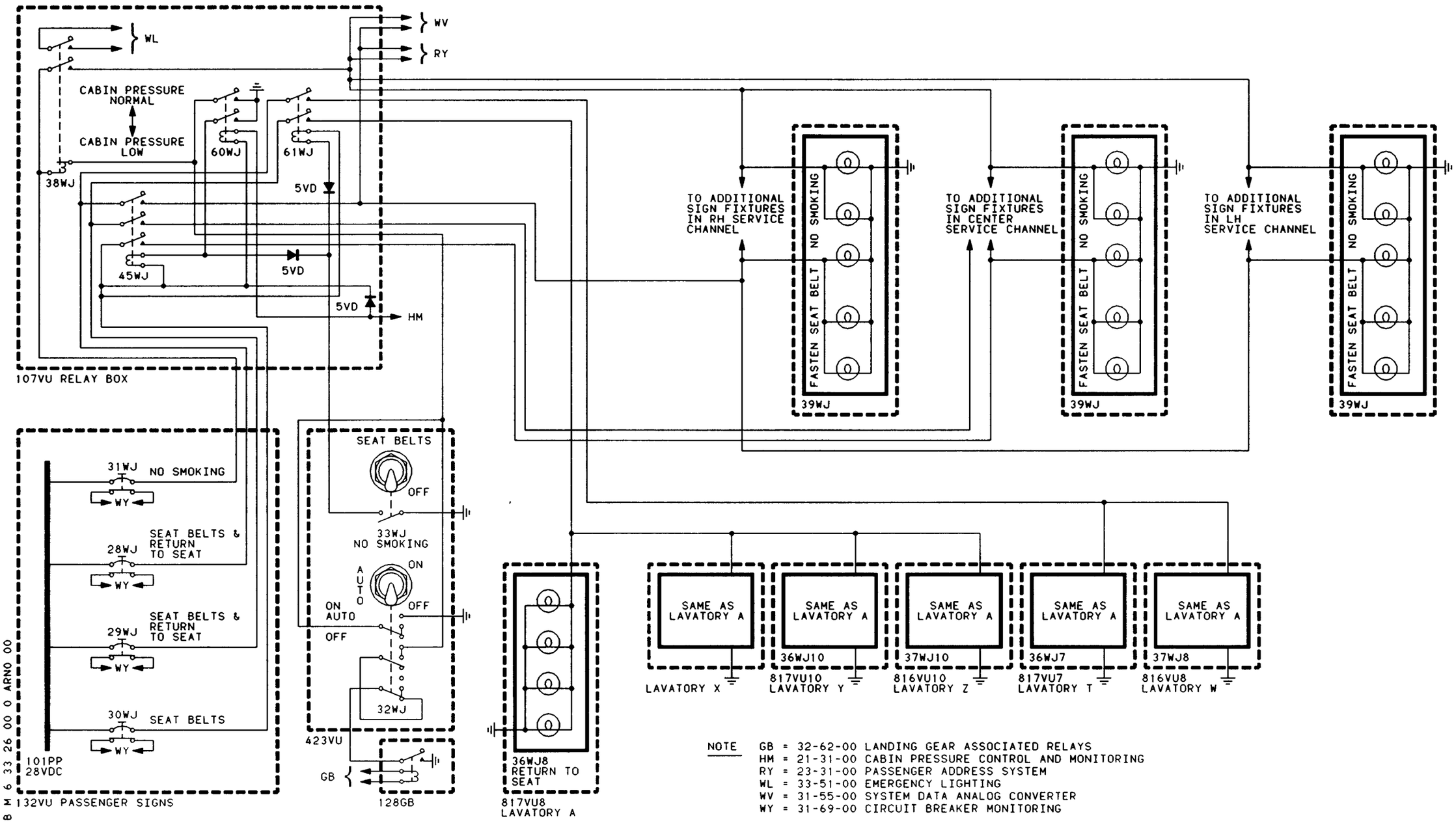
R **ON A/C 001-100,

A. The NO SMOKING, FASTEN SEAT BELT and RETURN TO SEAT signs are supplied from the 28 V DC busbar 101PP via the monitoring circuit breakers 28WJ thru 31WJ. A corresponding white OPEN annunciator, installed on the maintenance panel, comes on when a circuit breaker is open and the busbar energized.

(1)The NO SMOKING signs are controlled manually by the NO SMOKING switch 32WJ. The switch positions are identified ON, AUTO and OFF. In the ON position, the switch is grounded to energize relay 38WJ and all NO SMOKING and EXIT lights come on. In the AUTO position, the NO SMOKING



Passenger Lighted Signs - Schematic
Figure 005



NOTE GB = 32-62-00 LANDING GEAR ASSOCIATED RELAYS
HM = 21-31-00 CABIN PRESSURE CONTROL AND MONITORING
RY = 23-31-00 PASSENGER ADDRESS SYSTEM
WL = 33-51-00 EMERGENCY LIGHTING
WV = 31-55-00 SYSTEM DATA ANALOG CONVERTER
WY = 31-69-00 CIRCUIT BREAKER MONITORING

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Passenger Lighted Signs - Schematic
Figure 006

R

switch is grounded via the contacts of relay 128GB when the landing gear is in the downlocked position. Relay 38WJ is then energized and all NO SMOKING and EXIT lights come on.

(2)The FASTEN SEAT BELT and RETURN TO SEAT signs are controlled manually by the SEAT BELT switch 33WJ. The switch positions are identified SEAT BELT and OFF. In the SEAT BELT position, the switch is grounded to energize relays 45WJ and 61WJ and all FASTEN SEAT BELT and RETURN TO SEAT signs come on.

(3)In the event of rapid decompression, relay 60WJ is energized.

(4)Relays 38WJ and 45WJ are energized via the closed contacts of relay 60WJ to illuminate all NO SMOKING, EXIT lights and FASTEN SEAT BELTS signs irrespective of the position of the NO SMOKING and SEAT BELT switches.

(5)When the NO SMOKING, FASTEN SEAT and RETURN TO SEAT signs are operated, a low-tone signal and an announcement are broadcast over the passenger address system and the information SEAT BELT ON and NO SMOKING ON is displayed on the left ECAM display in the flight compartment.

R **ON A/C 101-200,

R NOTE: The announcement is only audible if the respective announcement
R reproducer is installed. (Ref 23-32-00)

R A. The NO SMOKING, FASTEN SEAT BELT and RETURN TO SEAT signs are supplied from
R the 28 V DC busbar 101PP via the monitoring circuit breakers 28WJ thru
R 31WJ. A corresponding white OPEN annunciator, installed on the maintenance
R panel, comes on when a circuit breaker is open and the busbar energized.

R (1)The NO SMOKING signs are controlled manually by the NO SMOKING switch
R 32WJ. The switch positions are identified ON, AUTO and OFF. In the ON
R position, the switch is grounded to energize relay 38WJ and all NO
R SMOKING and EXIT lights come on. In the AUTO position, the NO SMOKING
R switch is grounded via the contacts of relay 128GB when the landing gear
R is in the downlocked position. Relay 38WJ is then energized and all NO
R SMOKING and EXIT lights come on.
R (2)The FASTEN SEAT BELT and RETURN TO SEAT signs are controlled manually by
R the SEAT BELT switch 33WJ. The switch positions are identified SEAT
R BELT and OFF. In the SEAT BELT position, the switch is grounded to
R energize relays 45WJ and 61WJ and all FASTEN SEAT BELT and RETURN TO SEAT
R signs come on.
R (3)In the event of rapid decompression, relay 60WJ is energized.
R (4)Relays 38WJ and 45WJ are energized via the closed contacts of relay 60WJ
R to illuminate all NO SMOKING, EXIT lights and FASTEN SEAT BELTS signs
R irrespective of the position of the NO SMOKING and SEAT BELT switches.
R (5)When the NO SMOKING, FASTEN SEAT and RETURN TO SEAT signs are operated,
R a low-tone signal and an announcement are broadcast over the passenger
R address system and the information SEAT BELT ON and NO SMOKING ON is
R displayed on the left ECAM display in the flight compartment.

R **ON A/C 001-100,

B. LAVATORIES (Ref. Fig. 007)

R **ON A/C 101-200,

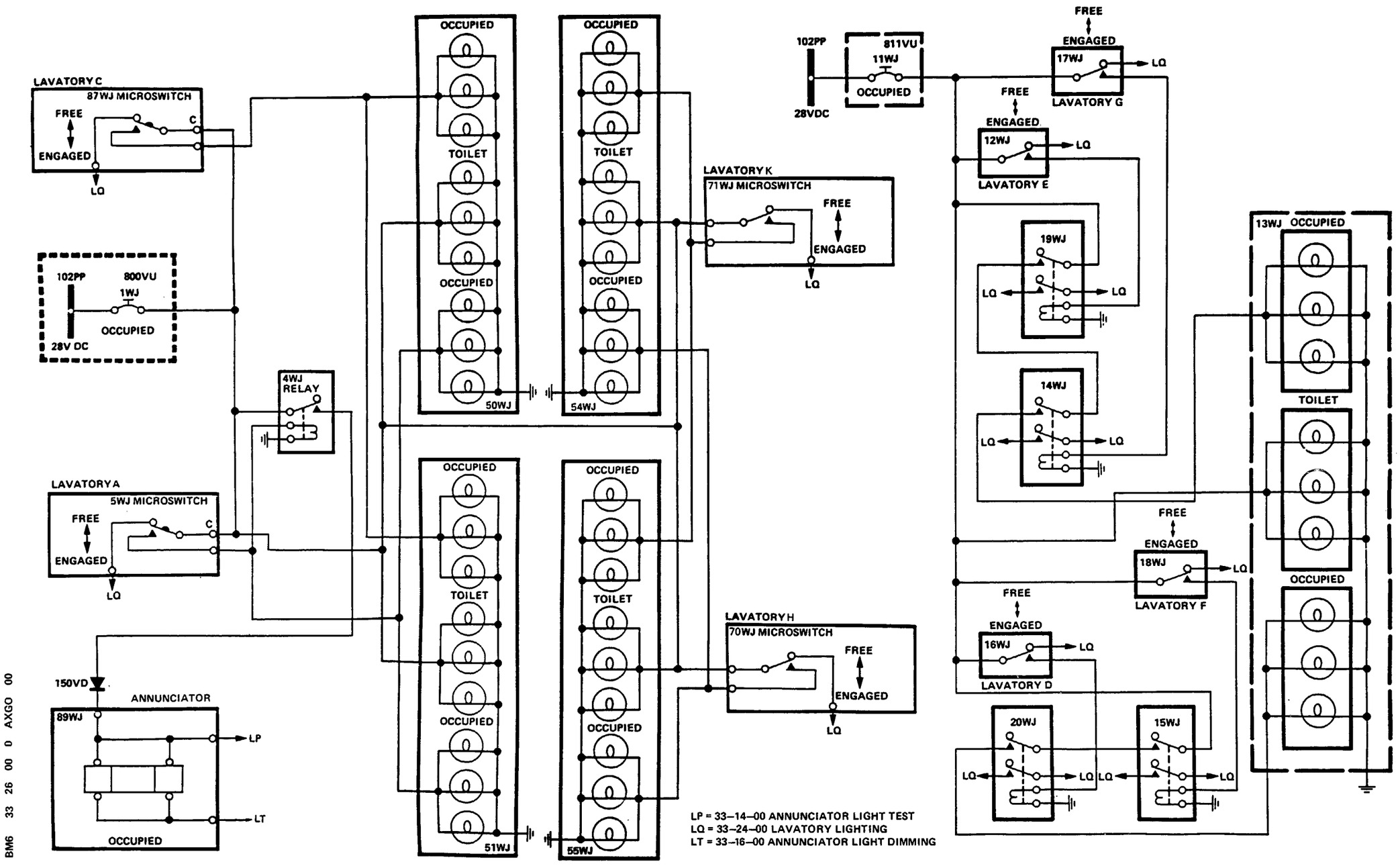
B. LAVATORIES (Ref. Fig. 008)

R **ON A/C 001-100,

(1)Forward Lavatory
The LAVATORY/OCCUPIED signs 50WJ, 51WJ, 54WJ and 55WJ are supplied from the 28 V DC busbar 102PP via circuit breaker 1WJ. The LAVATORY legend is illuminated when the busbar is energized and the circuit breaker is closed.
(a)When the lavatory door A is closed and locked, microswitch 5WJ, operated by the door locking mechanism, switches 28 V DC from the busbar to energize relay 4WJ which illuminate the LH OCCUPIED legends in 50WJ and 51WJ and the OCCUPIED annunciator 89WJ in the flight compartment. The microswitch also operates the lavatory lighting (Ref. 33-24-00).
(b)When the forward lavatory door C is closed and locked microswitch 87WJ, operated by the door locking mechanism, switches 28 V DC from the busbar to energize relay 86WJ which illuminate the RH OCCUPIED legends in 50WJ and 51WJ. The microswitch also operates the lavatory lighting (Ref. 33-24-00).
(2)MID Lavatories
(a)When the lavatory door H is closed and locked, microswitch 70WJ, operated by the door locking mechanism, switches 28 V DC from the busbar to illuminate the LH OCCUPIED legends in 54WJ and 55WJ. The microswitch also operates the lavatory lighting (Ref. 33-24-00).
(b)When the lavatory door K is closed and locked, microswitch 71WJ, operated, by the door locking mechanism, switches 28 V DC from the busbar to illuminate the RH OCCUPIED legends in 54WJ and 55WJ. The microswitch also operates the lavatory lighting (Ref. 33-24-00).
(3)Aft Lavatories
The LAVATORY/OCCUPIED sign 13WJ is supplied from the 28 V DC busbar 102PP via circuit breaker 11WJ. The LAVATORY symbol is illuminated when the busbar is energized and the circuit breaker is closed.
(a)When an aft lavatory door is closed and locked a microswitch, operated by the door locking mechanism, switches 28 V DC from the busbar to energize a relay which activates the circuit for the LH or RH OCCUPIED sign. When both LH or RH lavatory doors are closed and locked, the respective OCCUPIED legend is illuminated. The microswitch also operates the lavatory lighting (Ref. 33-24-00).

R **ON A/C 101-200,

(1)Forward Lavatory
The LAVATORY OCCUPIED legends 50W, 51WJ, 57WJ and 58WJ are supplied from the 28 V DC busbar 102PP via circuit breaker 1WJ. The lavatory symbols are illuminated when the busbar is energized and the circuit breaker is closed.



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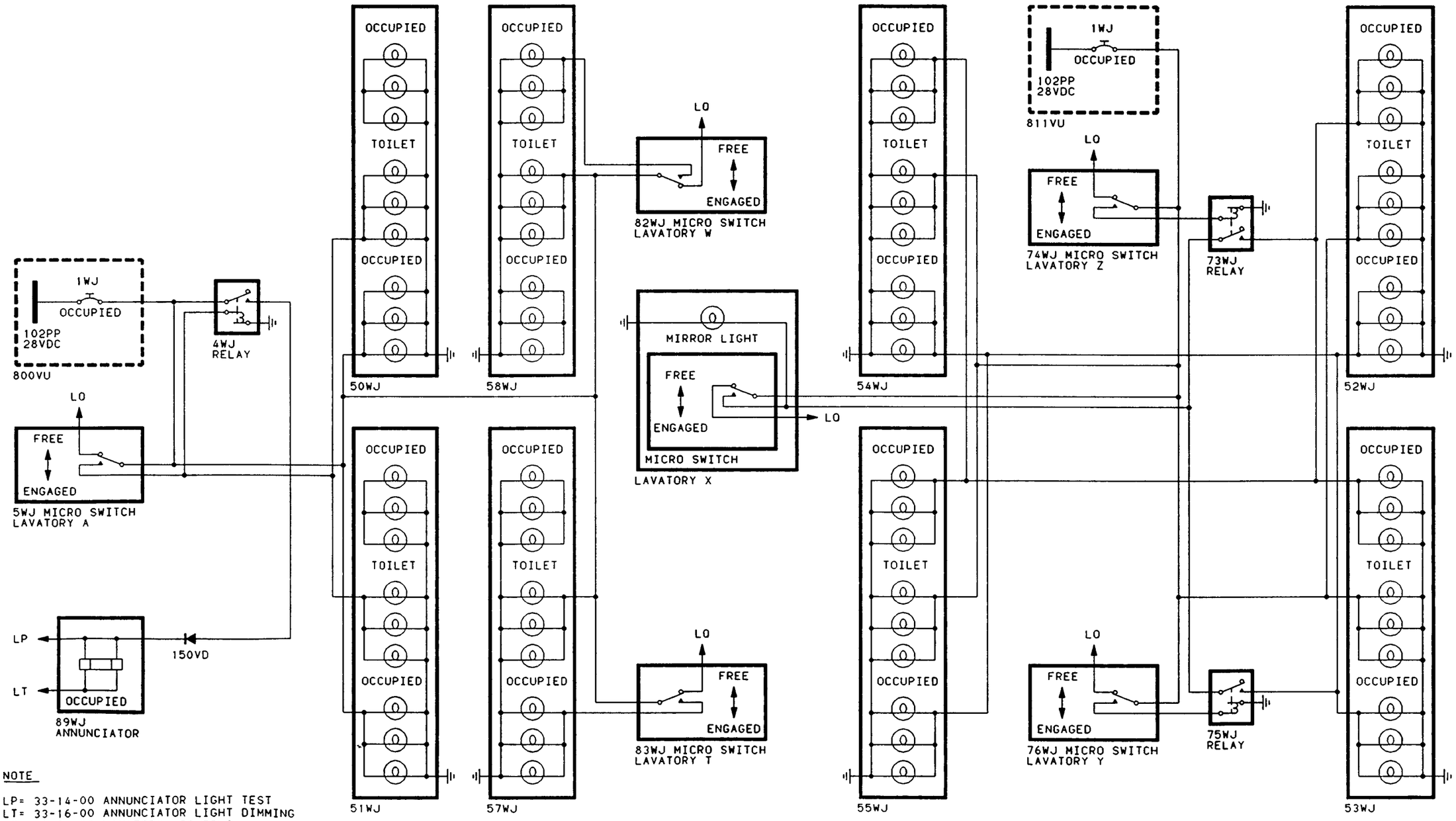
Passenger Lighted Signs - Schematic
Figure 007



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NOTE

LP= 33-14-00 ANNUNCIATOR LIGHT TEST
LT= 33-16-00 ANNUNCIATOR LIGHT DIMMING
LO= 33-24-00 LAVATORY LIGHTING

Passenger Lighted Signs - Schematic
Figure 008

R

(a)When the forward lavatory door A is closed and locked, microswitch 5WJ, operated by the door locking mechanism, switches 28 V DC from the busbar to illuminate the LH OCCUPIED legends in 50WJ and 51WJ and the OCCUPIED annunciator 89WJ in the flight compartment.
The microswitch also operates the lavatory lighting (Ref. 33-24-00).

(2)Mid Lavatories

(a)When the lavatory door T is closed and locked, microswitch 83WJ, operated by the door locking mechanism, switches 28 V DC from the busbar
R to illuminate the LH OCCUPIED legend in 57WJ in the business class
R section. The microswitch also operates the lavatory lighting (Ref. 33-24-00).

(b)When the lavatory door W is closed and locked, microswitch 82WJ, operated by the door locking mechanism, switches 28 V DC from the busbar
R to illuminate the RH OCCUPIED legend in 58WJ in the business class
R section. The microswitch also operates the lavatory lighting (Ref. 33-24-00).

(3)Aft Lavatories

The LAVATORY/OCCUPIED signs 52WJ, 53WJ, 53WJ, 54WJ and the mirror light in lavatory X are supplied from the 28V DC busbar 102PP via circuit breaker 11WJ. The LAVATORY symbols are illuminated when the busbar is energized and the circuit breaker is closed. When lavatory door X is closed and locked the mirror light in lavatory X illuminated.

(a)When both lavatory doors X and Y are closed and locked, microswitches from lavatory X and Y (76WJ), operated by the door locking mechanism, switches 28 V DC from the busbar to energize relay 75WJ.
Via closed contacts of relay 75WJ the LH OCCUPIED legends in 52WJ, 53WJ, 54WJ and 55WJ illuminate facing flight direction.
The microswitches also operate the lavatory lighting (Ref. 33-24-00).

(b)When both lavatory doors X and Z are closed and locked, microswitches from lavatory X and Z (74WJ) operated by the door locking mechanism, switches 28 V DC from the busbar to energize relay 73WJ.
Via closed contacts of relay 73WJ the RH OCCUPIED legends in 52WJ, 53WJ, 54WJ and 55WJ illuminate facing flight direction.
The microswitches also operate the lavatory lighting (Ref. 33-24-00).

1. Operational Test

R **ON A/C 001-100,

A. Reasons for the Job
(1)Test of passenger signs **NO SMOKING.**
(2)Test of passenger signs **FASTEN SEAT BELT** and **RETURN TO SEAT.**
(3)Test of **FWD** and **MID LAVATORY OCCUPIED** signs.
(4)Test of **AFT LAVATORY OCCUPIED** signs.
(5)Test of passenger signs **NO SMOKING** and **FASTEN SEAT BELT** in conjunction with Cabin Pressure and Monitoring System.

R **ON A/C 101-200,

R A. Reasons for the Job
R (1)Test of passenger signs **NO SMOKING.**
R (2)Test of passenger signs **FASTEN SEAT BELT** and **RETURN TO SEAT.**
R (3)Test of **FWD** and **MID LAVATORY OCCUPIED** signs.
R (4)Test of **AFT LAVATORY OCCUPIED** signs.
R (5)Test of passenger signs **NO SMOKING** and **FASTEN SEAT BELT** in conjunction with Cabin Pressure and Monitoring System.
R (6)Test of mirror light.

R **ON A/C ALL

B. Equipment and Material

ITEM	DESIGNATION
(1)	Electrical Ground Power Unit - 3-Phase, 115/200 V, 400 Hz

Referenced Procedures

- 21-31-00, P. Block 501	Cabin Pressure Control and Monitoring
- 23-31-00, P. Block 501	Passenger Address System
- 24-41-00, P. Block 301	AC External Power Control
- 25-40-00, P. Block 1	Lavatories
- 23-32-00, P. Block 501	Announcement - Music Tape Reproducer System
- 31-51-00, P. Block 201	ECAM System

C. Procedure
(1)Job Set-Up
(a)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(b)Make certain that electronics racks ventilation is correct.
(c)Make certain that the following circuit breakers are closed:

PANEL	SERVICE	IDENT.	LOCATION
132VU	LIGHTING-PASSENGERS SIGNS-SEAT BELTS/ RETURN TO SEAT	28WJ	P83
132VU	LIGHTING-PASSENGERS SIGNS-SEAT BELTS/ RETURN TO SEAT	29WJ	P82
132VU	LIGHTING-PASSENGERS SIGNS-SEAT BELTS	30WJ	P81
132VU	LIGHTING-PASSENGERS SIGNS-NO SMOKING	31WJ	P80
131VU	CABIN PRESS-SYS 1 VALVES MOTOR	1HM	C51
22VU	CABIN PRESS-SYS 1 REG	3HM	B17
131VU	CABIN PRESS-SYS 2 REG	4HM	C53
131VU	CABIN PRESS-SYS 2 VALVES MOTOR	100HM	C52

(d)Activate passenger address system (Ref. 23-31-00, P. Block 501).
(e)Activate cabin pressure and monitoring (Ref. 21-31-00, P. Block 501).
(f)Activate announcement music tape reproducer system (Ref. 23-32-00, P. Block 501).
(g)On overhead panel 21VU close circuit breakers, particularly those associated with ELEC & ECAM (Ref. 31-51-00, P. Block 201).
(h)Make certain that legends of 1 ECAM and SGU2 pushbutton switches display OFF. Using LEFT DISPLAY knob adjust brightness on left ECAM display unit. Press CLR pushbutton on ECAM control panel until MEMO mode is indicated.
(j)Open, safety and tag the following circuit breakers.

PANEL	SERVICE	IDENT.	LOCATION
800VU	LAVATORY FWD & MID/OCCUPIED	1WJ	G 4
811VU	LAVATORY AFT/OCCUPIED	11WJ	B 6

R **ON A/C 001-100,

(2)Test
NOTE : When selected, a prerecorded announcement is broadcast.
(a)Test of passenger signs NO SMOKING.

ACTION	RESULT
1. On panel 423VU: - place toggle switch NO SMOKING 32WJ in ON position.	In passenger compartment: - all passenger signs NO SMOKING come on and a low-tone chime is broadcast over passenger address system. On left ECAM display unit: - legend NO SMOKING ON comes on.
2. On panel 423VU: - place toggle switch NO SMOKING 32WJ in OFF position.	In passenger compartment: - all passenger signs NO SMOKING go off and a low-tone chime is broadcast over passenger adress system. On left ECAM display unit: - legend NO SMOKING ON goes off.

ACTION	RESULT
3. On panel 423VU: - place toggle switch **NO SMOKING 32WJ** in **AUTO** position	In passenger compartment: - all passenger signs **NO SMOKING** come on and a low-tone chime is broadcast over passenger address system. On left **ECAM** display unit: - legend **NO SMOKING ON** comes on.
4. On panel 423VU: - place toggle switch **NO SMOKING 32WJ** in **OFF** position.	In passenger compartment: - all passenger signs **NO SMOKING** go off and a low-tone chime is broadcast over passenger adress system. On left **ECAM** display unit: - legend **NO SMOKING ON** goes off.

R **ON A/C 101-200,

R (2)Test
R NOTE : The announcement is only audible, if the respective announcement
R reproducer is installed.

R ACTION	RESULT
R 1. On panel 423VU: R - place toggle switch **NO SMOKING 32WJ** in **ON** position.	In passenger compartment: - all passenger signs **NO SMOKING** come on, a low-tone chime and an announcement are broadcast over passenger address system. On left **ECAM** display unit: - legend **NO SMOKING ON** comes on.
R 2. On panel 423VU: R - place toggle switch **NO SMOKING 32WJ** in **OFF** position.	In passenger compartment: - all passenger signs **NO SMOKING** go off, a low-tone chime is broadcast over passenger adress system and the annoucement stops. On left **ECAM** display unit: - legend **NO SMOKING ON** goes off.
R 3. On panel 423VU: R - place toggle switch **NO SMOKING 32WJ** in **AUTO** position	In passenger compartment: - all passenger signs **NO SMOKING** come on, a low-tone chime and an announcement are broadcast over passenger address system. On left **ECAM** display unit: - legend **NO SMOKING ON** comes on.
R 4. On panel 423VU: R - place toggle switch **NO SMOKING 32WJ** in **OFF** position.	In passenger compartment: - all passenger signs **NO SMOKING** go off, a low-tone chime is broadcast over passenger adress system and the annoucement stops. On left **ECAM** display unit:

ACTION	RESULT
	- legend **NO SMOKING ON** goes off.

**ON A/C 001-100,

(b)Test of passenger signs **FASTEN SEAT BELT/RETURN TO SEAT.**

ACTION	RESULT
1. On panel 423VU: - place toggle switch **SEAT BELTS 33WJ** in **SEAT BELTS** position.	In passenger compartment: - all passenger signs **FASTEN SEAT BELT** come on and a low-tone chime is broadcast over passenger address system. On left **ECAM** display unit: - legend **FASTEN SEAT BELT ON** comes on. In lavatories: - all passenger signs **RETURN TO SEAT** come on.
2. On panel 423VU: - place toggle switch **SEAT BELTS 33WJ** in **OFF** position.	In passenger compartment: - passenger signs listed above go off and a low-tone chime is broadcast over passenger address system. On left **ECAM** display unit: - legend **FASTEN SEAT BELT ON** goes off.

**ON A/C 101-200,

(b)Test of passenger signs **FASTEN SEAT BELT/RETURN TO SEAT.**

ACTION	RESULT
1. On panel 423VU: - place toggle switch **SEAT BELTS 33WJ** in **SEAT BELTS** position.	In passenger compartment: - all passenger signs **FASTEN SEAT BELT** come on, a low-tone chime and an announcement are broadcast over passenger address system. On left **ECAM** display unit: - legend **FASTEN SEAT BELT ON** comes on. In lavatories: - all passenger signs **RETURN TO SEAT** come on.
2. On panel 423VU: - place toggle switch **SEAT BELTS 33WJ** in **OFF** position.	In passenger compartment: - passenger signs listed above go off, a low-tone chime is broadcast

ACTION	RESULT
	over passenger address system and the annoucement stops. On left ECAM display unit: - legend FASTEN SEAT BELT ON goes off.

**ON A/C 001-100,

(c)Test of forward and mid LAVATORY OCCUPIED signs.
NOTE : During the following test the lavatory doors may be locked or unlocked externally by inserting a suitable tool into the mechanical OCCUPIED sign in the door and moving the sign in the required direction (Ref. 25-40-00, P. Block 1).

ACTION	RESULT
1. On panel 800VU: - close circuit breaker LAVATORY FRONT & MIDDLE/OCCUPIED 1WJ.	In LAVATORY OCCUPIED signs 50WJ (FWD R/H LAVATORY C), 51WJ (FWD L/H LAVATORY A), 54WJ (MID R/H LAVATORY K) and 55WJ (MID L/H LAVATORY H): - LAVATORY legend comes on.
2. At lavatory A: - close and lock lavatory door.	In LAVATORY OCCUPIED signs 50WJ and 51WJ (FWD LAVATORIES): - LH OCCUPIED legends come on.
3. At lavatory C: - close and lock lavatory door.	In LAVATORY OCCUPIED signs 50WJ and 51WJ (FWD LAVATORIES): - RH OCCUPIED legends come on. On panel 120VU: - annunciator TOILET OCCUPIED 89WJ comes on.
4. At lavatory A: - unlock and open lavatory door.	In LAVATORY OCCUPIED signs 50WJ and 51WJ (FWD LAVATORIES): - LH OCCUPIED legends go off. On panel 120VU: - annunciator TOILET OCCUPIED 89WJ goes off.
5. At lavatory C: - unlock and open lavatory door.	In LAVATORY OCCUPIED signs 50WJ and 51WJ (FWD LAVATORIES): - RH OCCUPIED legends go off.
6. At lavatory H: - close and lock lavatory door.	In LAVATORY OCCUPIED signs 54WJ and 55WJ (MID LAVATORIES): - LH OCCUPIED legends come on.
7. At lavatory H: - unlock and open lavatory door.	In LAVATORY OCCUPIED signs 54WJ and 55WJ (MID LAVATORIES): - LH OCCUPIED legends go off.
8. At lavatory K: - close and lock lavatory door.	In LAVATORY OCCUPIED signs 54WJ and 55WJ (MID LAVATORIES): - RH OCCUPIED legends come on.

ACTION	RESULT
9. At lavatory K: - unlock and open lavatory door.	In LAVATORY OCCUPIED signs 54WJ and 55WJ (MID LAVATORIES): - RH OCCUPIED legends go off.
10. On panel 800VU: - Open circuit breaker LAVATORY FRONT & MIDDLE/OCCUPIED 1WJ.	In LAVATORY OCCUPIED signs 50WJ (FWD R/H LAVATORY C), 51WJ (FWD L/H LAVATORY A), 54WJ (MID R/H LAVATORY K) and 55WJ (MID L/H LAVATORY H): - LAVATORY legend goes off.

R **ON A/C 101-200,

(c)Test of forward and mid LAVATORY OCCUPIED signs.

NOTE : During the following test the lavatory doors may be locked or unlocked externally by inserting a suitable tool into the mechanical OCCUPIED sign in the door and moving the sign in the required direction (Ref. 25-40-00, P. Block 1).

ACTION	RESULT
1. On panel 800VU: - close circuit breaker LAVATORY FWD & MID/OCCUPIED 1WJ.	In LAVATORY OCCUPIED signs 50WJ, 51WJ, 57WJ and 58WJ - lavatory symbols come on.
2. At lavatory A: - close and lock lavatory door.	In LAVATORY OCCUPIED signs 50WJ and 51WJ: - LH OCCUPIED legends come on. On panel 120VU: - annunciator 89WJ comes on.
3. At lavatory A: - unlock and open lavatory door.	In LAVATORY OCCUPIED signs 50WJ and 51WJ: - LH OCCUPIED legends go off. On panel 120VU: - annunciator 89WJ goes off.
R 4. At lavatory T: R - close and lock lavatory door.	In LAVATORY OCCUPIED sign 57WJ: - LH OCCUPIED legend comes on.
R 5. At lavatory W: R - Close and lock lavatory door.	In LAVATORY OCCUPIED sign 58WJ: - RH OCCUPIED legend comes on.
R 6. At lavatory T: R - unlock and open lavatory door.	In LAVATORY OCCUPIED sign 57WJ: - LH OCCUPIED legend goes off.
R 7. At lavatory W: R - unlock and open Lavatory door.	In LAVATORY OCCUPIED sign 58WJ: - RH OCCUPIED legend goes off.
8. On panel 800VU: - open circuit breaker LAVATORY FWD & MID/OCCUPIED 1WJ.	In LAVATORY OCCUPIED signs 50WJ, 51WJ, 57WJ and 58WJ: - LAVATORY symbols go off.

R **ON A/C 001-100,

(d)Test of aft LAVATORY OCCUPIED signs.

NOTE : During the following test the lavatory doors may be locked or unlocked externally by inserting a suitable tool into the mechanical OCCUPIED sign in the door and moving the sign in the required direction (Ref. 25-40-00, P. Block 1).

ACTION	RESULT
1. On panel 811VU: - close circuit breaker LAVATORY AFT /OCCUPIED 11WJ.	In LAVATORY OCCUPIED sign 13WJ: - LAVATORY legend comes on.
2. At lavatory D: - close and lock lavatory door.	In LAVATORY OCCUPIED sign 13WJ: - LH OCCUPIED legend remains off.
3. At lavatory F: - close and lock lavatory door.	In LAVATORY OCCUPIED sign 13WJ: - LH OCCUPIED legend comes on.
4. At lavatory D: - unlock and open lavatory door.	In LAVATORY OCCUPIED sign 13WJ: - LH OCCUPIED legend goes off.
5. At lavatory F: - unlock and open lavatory door.	In LAVATORY OCCUPIED sign 13WJ: - LH OCCUPIED legend remains off.
6. At lavatory E: - close and lock lavatory door.	In LAVATORY OCCUPIED sign 13WJ: - RH OCCUPIED legend remains off.
7. At lavatory G: - close and lock lavatory door.	In LAVATORY OCCUPIED sign 13WJ: - RH OCCUPIED legend comes on.
8. At lavatory E: - unlock and open lavatory door.	In LAVATORY OCCUPIED sign 13WJ: - RH OCCUPIED legend goes off.
9. At lavatory G: - unlock and open lavatory door.	In LAVATORY OCCUPIED sign 13WJ: - RH OCCUPIED legend remains off.
10. On panel 811VU: - open circuit breaker LAVATORY AFT/ OCCUPIED 11WJ.	In LAVATORY OCCUPIED sign 13WJ: - LAVATORY legend goes off.

R **ON A/C 101-200,

R (d)Test of aft LAVATORY OCCUPIED signs.
R NOTE : During the following tests the lavatory doors may by locked or unlocked externally by inserting a suitable tool into the mechanical OCCUPIED sign in the door and moving the sign in the required direction (Ref. 25-40-00, P. Block 1).

R ACTION	RESULT
R 1. On panel 811VU: R - close circuit breaker LAVATORY AFT/OCCUPIED 11WJ.	In LAVATORY OCCUPIED signs 52WJ and 53WJ: - LAVATORY symbols come on.
R 2. At lavatory Y: R - close and lock lavatory door.	In LAVATORY OCCUPIED signs 52WJ and 53WJ: - LH OCCUPIED legends remain off.
R 3. At lavatory X: R - close and lock lavatory door.	In LAVATORY OCCUPIED signs 52WJ and 53WJ: - LH OCCUPIED legends come on.
R 4. At lavatory Y:	In LAVATORY OCCUPIED signs 52WJ

ACTION	RESULT
	and 53WJ:
- unlock and open lavatory door.	- LH OCCUPIED legends go off.
5. At lavatory X:	In LAVATORY OCCUPIED signs 52WJ and 53WJ:
- unlock and open lavatory door.	- LH OCCUPIED legends remain off.
6. At lavatory Z:	In LAVATORY OCCUPIED signs 52WJ and 53WJ:
- close and lock lavatory door.	- RH OCCUPIED legends remain off.
7. At lavatory X:	In LAVATORY OCCUPIED signs 52WJ and 53WJ:
- close and lock lavatory door.	- RH OCCUPIED legends come on.
8. At lavatory Z:	In LAVATORY OCCUPIED signs 52WJ and 53WJ:
- unlock and open lavatory door.	- RH OCCUPIED legends go off.
9. At lavatory X:	In LAVATORY OCCUPIED signs 52WJ and 53WJ:
- unlock and open lavatory door.	- RH OCCUPIED legends remain off.
10. On panel 811VU:	In LAVATORY OCCUPIED signs 52WJ and 53WJ:
- open circuit breaker LAVATORY AFT/OCCUPIED 11WJ.	- LAVATORY symbols go off.

**ON A/C 001-100,

(e)Test of passenger signs NO SMOKING and FASTEN SEAT BELT in conjunction with Cabin Pressure and Monitoring System.
NOTE : The cabin pressure automatic controller 105HM (96VU) installed in the MINIMUM EQIPMENT BAY fulfills the same functions as 106HM on 92VU.

ACTION	RESULT
1. In avionics compartment on cabin pressure automatic controller 106HM in 92VU: - place selector switch on 106HM in COMPUTER position. - press and hold pushbutton switch PUSH TO TEST on 106HM.	In passenger compartment: - all passenger signs NO SMOKING and FASTEN SEAT BELT come on, a low-tone chime and an announcement is broadcast over passenger address system. In flight compartment: - the left ECAM display NO SMOKING ON and SEAT BELT ON illuminates for a short period. In lavatories: - a low-tone chime is broadcast over passenger address system. In avionics compartment: - the control light 'BITE OK' on controller 106HM flashes for duration of test.

ACTION	RESULT
	After automatic test (approx. 5 sec): In passenger compartment: - all passenger signs **NO SMOKING** and **FASTEN SEAT BELT** go off, a low-tone chime is broadcast over passenger address system and the announcement stops. In lavatories: - a low-tone chime is broadcast over passenger address system. In flight compartment: - the left **ECAM** display **NO SMOKING ON** and **SEAT BELTS ON** goes off.
2. On cabin pressure automatic controller **106HM** in **92VU**: - place selector switch on **106HM** in **NORM FLT** position.	

R ****ON A/C 101-200,**

R (e)Test of passenger signs **NO SMOKING** and **FASTEN SEAT BELT** in conjunction with Cabin Pressure and Monitoring System.
R **NOTE** : The cabin pressure automatic controller **105HM (96VU)** installed in the **MINIMUM EQIPMENT BAY** fulfills the same functions as **106HM** on **92VU**. The announcement is only audible, if the respective annnouncement reproducer is installed.

ACTION	RESULT
1. In avionics compartment on cabin pressure automatic controller **106HM** in **92VU**: - place selector switch on **106HM** in **COMPUTER** position. - press and hold pushbutton switch **PUSH TO TEST** on **106HM**.	In passenger compartment: - all passenger signs **NO SMOKING** and **FASTEN SEAT BELT** come on, a low-tone chime and an announcement is broadcast over passenger address system. In flight compartment: - the left **ECAM** display **NO SMOKING ON** and **SEAT BELT ON** illuminates for a short period. In lavatories: - a low-tone chime is broadcast over passenger address system. In avionics compartment: - the control light **'BITE OK'** on controller **106HM** flashes for duration of test. After automatic test (approx. 5 sec): In passenger compartment:

ACTION	RESULT
	- all passenger signs NO SMOKING and FASTEN SEAT BELT go off, a low-tone chime is broadcast over passenger address system and the announcement stops. In lavatories: - a low-tone chime is broadcast over passenger address system. In flight compartment: - the left ECAM display NO SMOKING ON and SEAT BELTS ON goes off.
2. On cabin pressure automatic controller 106HM in 92VU: - place selector switch on 106HM in NORM FLT position. (f)Test of mirror light	

ACTION	RESULT
1. On panel 811VU: - close circuit breaker LAVATORY AFT/OCCUPIED 11WJ.	In LAVATORY OCCUPIED signs 52WJ and 53WJ: - LAVATORY symbols come on.
2. At lavatory X: - close and lock lavatory door.	In LAVATORY X: - Mirror light comes on.
3. At lavatory X: - unlock and open lavatory door.	In LAVATORY X: - Mirror light goes off.
1. On panel 811VU: - open circuit breaker LAVATORY AFT/OCCUPIED 11WJ.	In LAVATORY OCCUPIED signs 52WJ and 53WJ: - LAVATORY symbol goes off.

**ON A/C ALL

(3)Close-Up
(a)Deactivate the passenger address system (Ref. 23-31-00, P. Block 501).
(b)Deactivate the cabin pressure and monitoring (Ref. 21-31-00, P. Block 501).
(c)Deactive the announcement tape reproducer system (Ref. 23-32-00, P. Block 501).
(d)Open circuit breakers on overhead panel 21VU, particularly those associated with ELEC & ECAM.
(e)De-energize the aircraft electrical network and disconnect the electrical ground power unit (24-41-00, P. Block 301).

NO SMOKING/FASTEN SEAT BELT SIGN FIXTURE - REMOVAL/INSTALLATION

1. Reason for the Job

A. Replacement of a defective lamp block.

B. Replacement of a defective lamp block housing.

2. Equipment and Materials

ITEM	DESIGNATION
A.	Fixture, NO SMOKING/FASTEN SEAT BELT Sign
B.	Electrical Ground Power Unit - 3-Phase, 115/200 V, 400 Hz

Referenced Procedures

- 25-25-00, P. Block 1	Passenger Service Units
- 24-41-00, P. Block 301	AC External Power Control

3. Procedure

A. Job Set-Up

(1)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
132VU	LIGHTING-PASSENGERS SIGNS-SEAT BELTS/ TO SEAT	28WJ	P83
132VU	LIGTHING-PASSENGERS SIGNS-SEAT BELTS/ RETURN	29WJ	P82
132VU	LIGHTING-PASSENGERS SIGNS-SEAT BELTS	30WJ	P81
132VU	LIGHTING-PASSENGER SIGNS-NO SMOKING	31WJ	P80

B. Removal

(1)Lamp Block

(a)Pull lamp block (1) away from housing (2).

(2)Lamp Block Housing

(a)Press retaining clips (3) together and pull lamp block housing (2) out of panel.

(b)Disconnect electrical connector (4).

C. Installation

(1)Lamp Block Housing

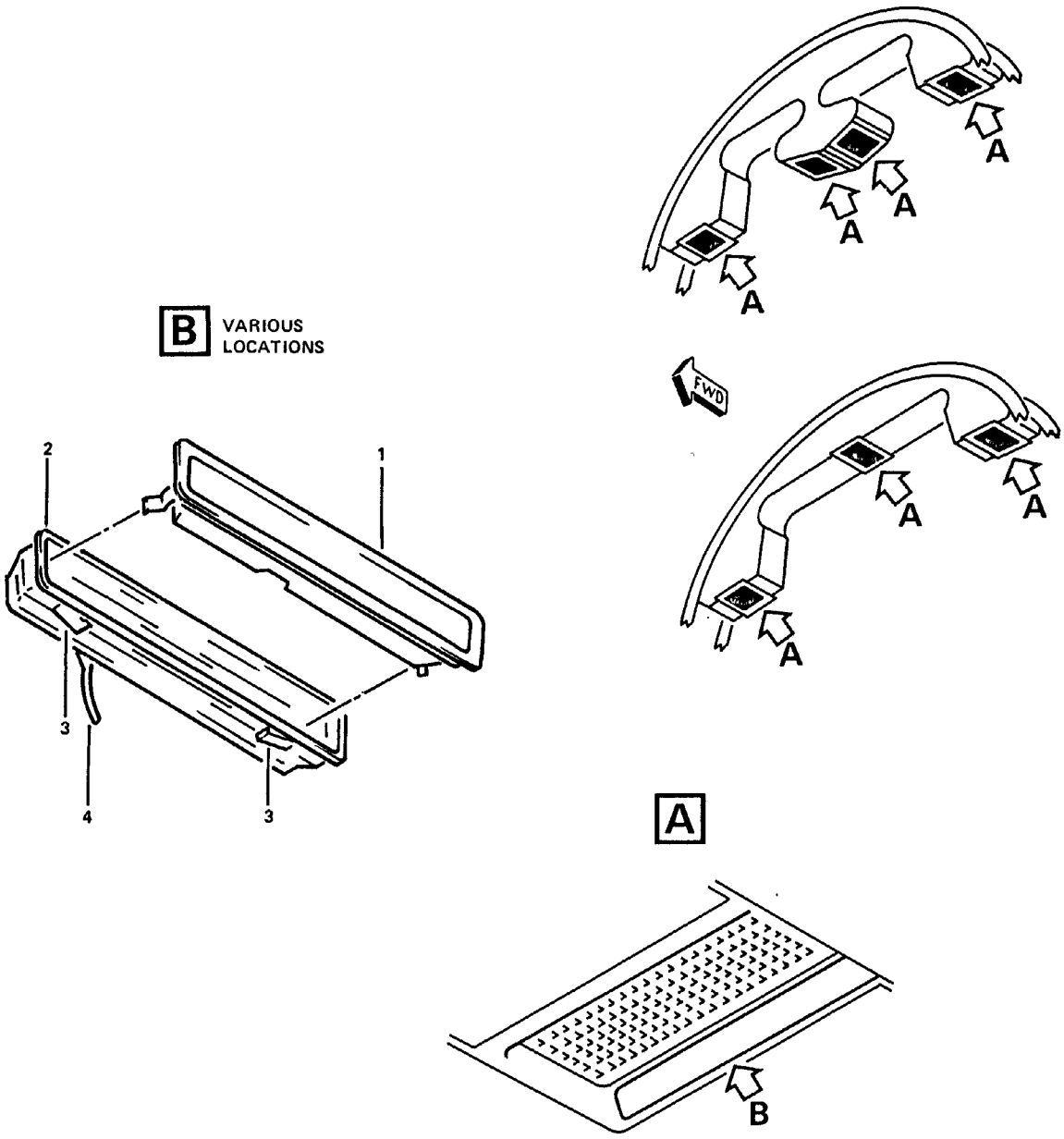
(a)Connect electrical connector (4).

(b)Install the lamp block housing (2) and locate the retaining clips (3) into panel.

(2)Lamp Block

(a)Position the lamp block (1) in the lamp block housing (2) and push until locked.

(Ref. Fig. 401)



BM6 33 26 11 4 AAAO 00

No Smoking - Fasten Seat Belt Sign Fixture
Figure 401

D. Test

(1)Connect electrical ground power unit and energize aircraft electrical network (Ref. 24-41-00, P. Block 301).

(2)Remove safety clips and tags and close circuit breakers 28WJ thru 31WJ.

ACTION	RESULT
1. On panel 423VU: - place toggle switch 32WJ in the NO SMOKING/ON position.	In passenger compartment: - All passenger signs NO SMOKING come on.
2. On panel 423VU: - place toggle switch 33WJ in the SEAT BELTS position.	In passenger compartment: - All passenger signs FASTEN SEAT BELT come on.
3. On panel 423VU: - place toggle switch 32WJ and 33WJ in the OFF position.	In passenger compartment: - All passenger signs NO SMOKING and FASTEN SEAT BELT go off.

E. Close-Up

(1)De-energize the aircraft electrical network and disconnect the electrical ground power unit (Ref. 24-41-00, P. Block 301).

(2)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.

RETURN TO SEAT SIGN FIXTURE - REMOVAL/INSTALLATION

1. Reasons for the Job

A. Replacement of a defective lamp block.

B. Replacement of a defective lamp block housing.

2. Equipment and Materials

ITEM	DESIGNATION
A.	Electrical Ground Power Unit - 3-Phase, 115/200 V, 400 Hz
Referenced Procedure - 24-41-00, P. Block 301	AC External Power Control

3. Procedure

A. Job Set-Up
(1)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
132VU	LIGHTING-PASSENGERS SIGNS-SEAT BELTS/ RETURN TO SEAT	28WJ	P83
132VU	LIGHTING-PASSENGERS SIGNS-SEAT BELTS/ RETURN TO SEAT	29WJ	P82
132VU	LIGHTING-PASSENGERS SIGNS-SEAT BELTS	30WJ	P81

R **ON A/C 001-100,

B. Removal
(1)Lamp Block
(a)Pull lamp block (1) away from lamp block housing (2).
(2)Lamp Block Housing
(a)To remove lamp block housing (2) press retaining clips (3) together and pull out of panel.
(b)Disconnect electrical wiring (4).

C. Installation
(1)Lamp Block Housing
(a)Connect electrical wiring (4).
(b)Install the lamp block housing (2) and locate the retaining clips (3).
(2)Lamp Block
(a)Locate the lamp block (1) into the lamp block housing (2) and push until locked.

R **ON A/C 101-200,

R B. Removal of the return to seat sign in lavatory A, T, W, Y and Z.
R (1)Lamp Block
R (a)Pull lamp block (1) away from lamp block housing (2).
R (2)Lamp Block Housing
R (a)To remove lamp block housing (2) press retaining clips (3) together and pull out of panel.
R (b)Disconnect electrical wiring (4).

R C. Removal of the return to seat sign in lavatory X.
R (1)Remove the lens (5).
R (2)Push the release lever to open the service cabinet door (6).
R (3)Remove the service box (7).
R (4)Remove the screws (8) and (9) and the lower service cabinet (10).
R (5)Identify all the electrical wires before you disconnect them.
R (6)Disconnect the electrical connectors (11) from the return to seat sign (12).
R (7)Release the spring clips (13) and remove the return to seat sign (12).

R D. Installation of the return to seat sign in lavatory A, T, W, Y and Z.
R (1)Lamp Block Housing
R (a)Connect electrical wiring (4).
R (b)Install the lamp block housing (2) and locate the retaining clips (3).
R (2)Lamp Block
R (a)Locate the lamp block (1) into the lamp block housing (2) and push until locked.

R E. Installation of the return to seat sign in lavatory X.
R (1)Install the return to seat sign (12) to the lower service cabinet (10) and make sure that the spring clips (13) locks into position with a click.
R (2)Connect the electrical connectors (11) as identified during the removal procedure.
R (3)Install the lower service cabinet (10) with the screws (9) and (8).
R (4)Install the service box (7).
R (5)Close the service cabinet door (6).
R (6)Install the lens (5).

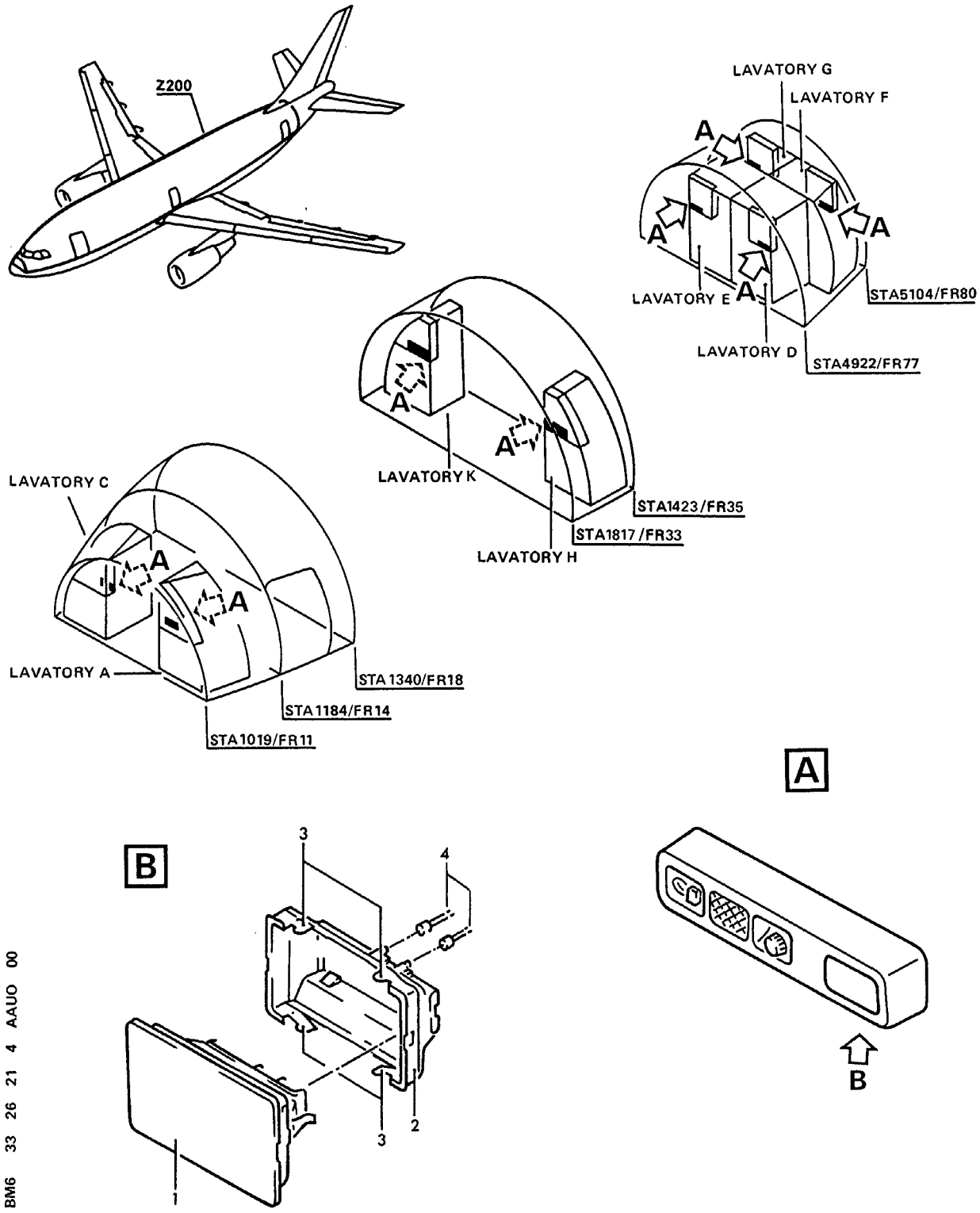
R **ON A/C 001-100,

(Ref. Fig. 401)

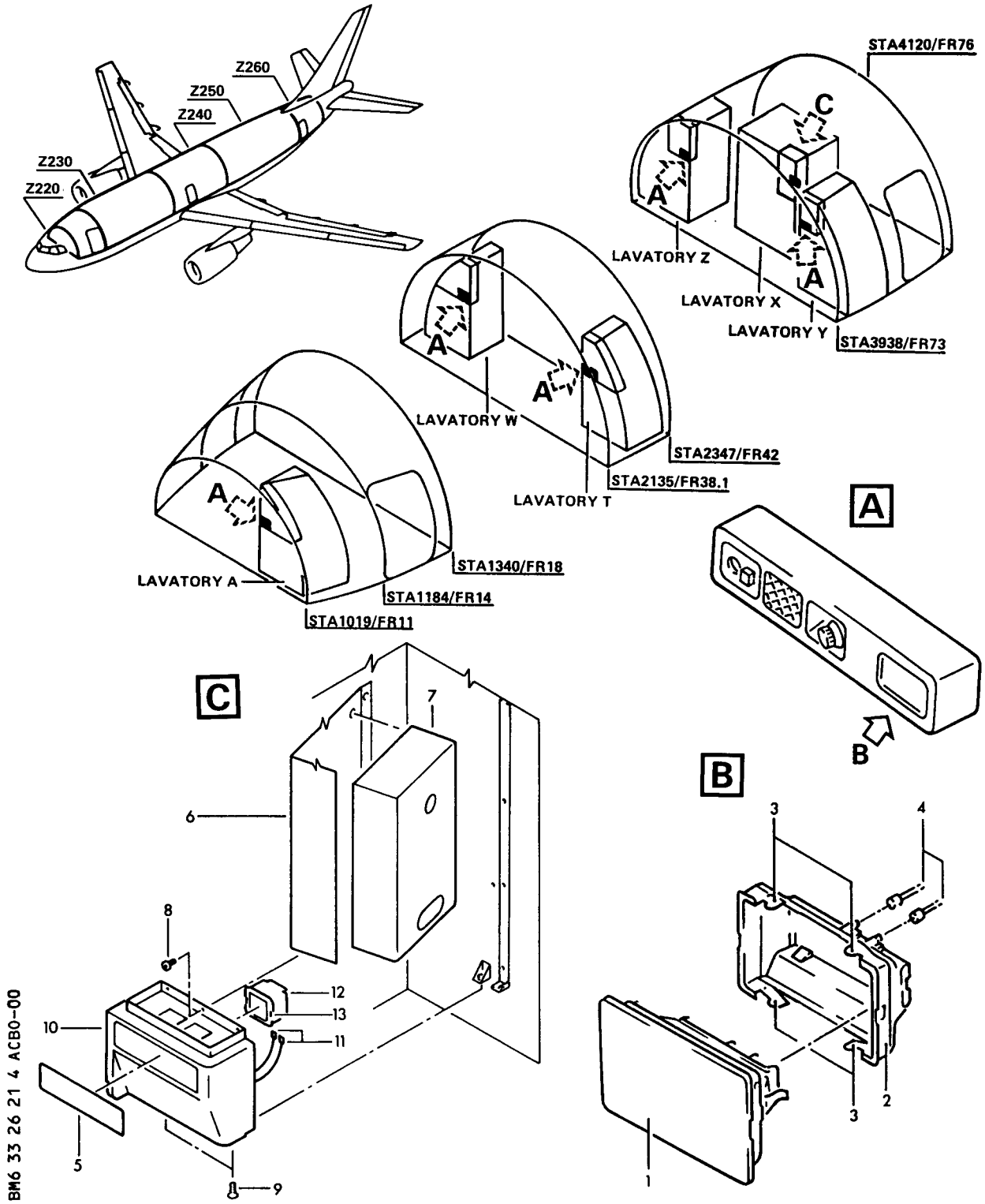
R **ON A/C 101-200,

R (Ref. Fig. 402)

R **ON A/C ALL



Return to Seat Sign - Fixture
Figure 401



Return to Seat Sign - Fixture
Figure 402

R

D. Test

(1) Remove safety clips and tags, and close circuit breakers 28WJ, 29WJ and 30WJ.

(2) Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).

ACTION	RESULT
1. On panel 423VU: - place toggle switch 33WJ in SEAT BELTS position.	In lavatories: - all passenger signs RETURN TO SEAT (CABIN) come on.
2. On panel 423VU: - place toggle switch 33WJ in OFF position.	In lavatories: - all passenger signs RETURN TO SEAT (CABIN) go off.

E. Close-Up

(1) De-energize the aircraft electrical network and disconnect the ground power unit (Ref. 24-41-00, P. Block 301).

(2) Make certain that working area is clean and clear of tools and miscellaneous items of equipment.

LAVATORY/OCCUPIED SIGN FIXTURE - REMOVAL/INSTALLATION

1. Equipment and Materials

ITEM	DESIGNATION
A.	Circuit Breaker Safety Clips and Tags
B.	Sign - LAVATORY/OCCUPIED
C.	Electrical Ground Power Unit - 3-Phase, 115/200 V, 400 Hz
D.	Stepladder, 1.0 m (3.3 ft.)

Referenced Procedures

- 24-41-00, P. Block 301	AC External Power Control
- 25-23-11, P. Block 401	Ceiling Panels
- 25-25-00, P. Block 1	Passenger Service Units
- 25-40-00, P. Block 1	Lavatories

2. Procedure

A. Job Set-Up

(1)Forward, Middle and Aft Sign

(a)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
800VU	LAVATORY FWD & MID-OCCUPIED	1WJ	G 4
811VU	LAVATORY AFT-OCCUPIED	11WJ	B 6

(b)Position stepladder.

R **ON A/C 001-100,

B. Removal

(1)FWD signs 50WJ and 51WJ

(a)Remove ceiling panel (Ref. 25-23-11, P. Block 401).

(b)Disconnect electrical connector (3).

(c)Support sign (4), remove screws (1), washers (2) and sign (4).

(2)MID signs 54WJ and 55WJ and AFT sign 13WJ

(a)Remove filler panel (Ref. 25-25-00, P. Block 1).

(b)Disconnect electrical connector (3).

(c)Support sign (4), remove screws (1), washers (2) and sign (4).

C. Installation

(1)FWD signs 50WJ and 51WJ

(a)Position sign (4) and secure using screws (1) and washers (2).

(b)Connect electrical connector (3).

(c)Install ceiling panel (Ref. 25-23-11, P. Block 401).

(2)MID signs 54WJ, 55WJ and AFT sign 13WJ

(a)Position sign (4) and secure using screws (1) and washers (2).

(b)Connect electrical connector (3).

(c)Install filler panel (Ref. 25-25-00, P. Block 1).

R **ON A/C 101-200,

R B. Removal
R (1)FWD Signs 50WJ and 51WJ
R (a)Remove ceiling panel (Ref. 25-23-11, P. Block 401).
R (b)Disconnect electrical connector (3).
R (c)Support sign (4), remove screws (1), washers (2) and sign (4).
R (2)MID Signs 54WJ, 55WJ, 57WJ and 58WJ
R (a)Disconnect electrical connector (3).
R (b)Support sign (4), remove screws (1), washers (2) and sign (4).
R (3)AFT Signs 52WJ and 53WJ
R (a)Remove filler panel (Ref. 25-25-00, P. Block 1).
R (b)Disconnect electrical connector (3).
R (c)Support sign (4), remove screws (1), washers (2) and sign (4).

R C. Installation
R (1)FWD Signs 50WJ and 51WJ
R (a)Position sign (4) and secure using screws (1) and washers (2).
R (b)Connect electrical connector (3).
R (c)Install ceiling panel (Ref. 25-23-11, P. Block 401).
R (2)MID Signs 54WJ, 55WJ, 57WJ and 58WJ
R (a)Position sign (4) and secure using screws (1) and washers (2).
R (b)Connect electrical connector (3).
R (3)AFT Signs 52WJ and 53WJ
R (a)Position sign (4) and secure using screws (1) and washers (2).
R (b)Connect electrical connector (3).
R (c)Install filler panel (Ref. 25-25-00, P. Block 1).

R **ON A/C 001-100,

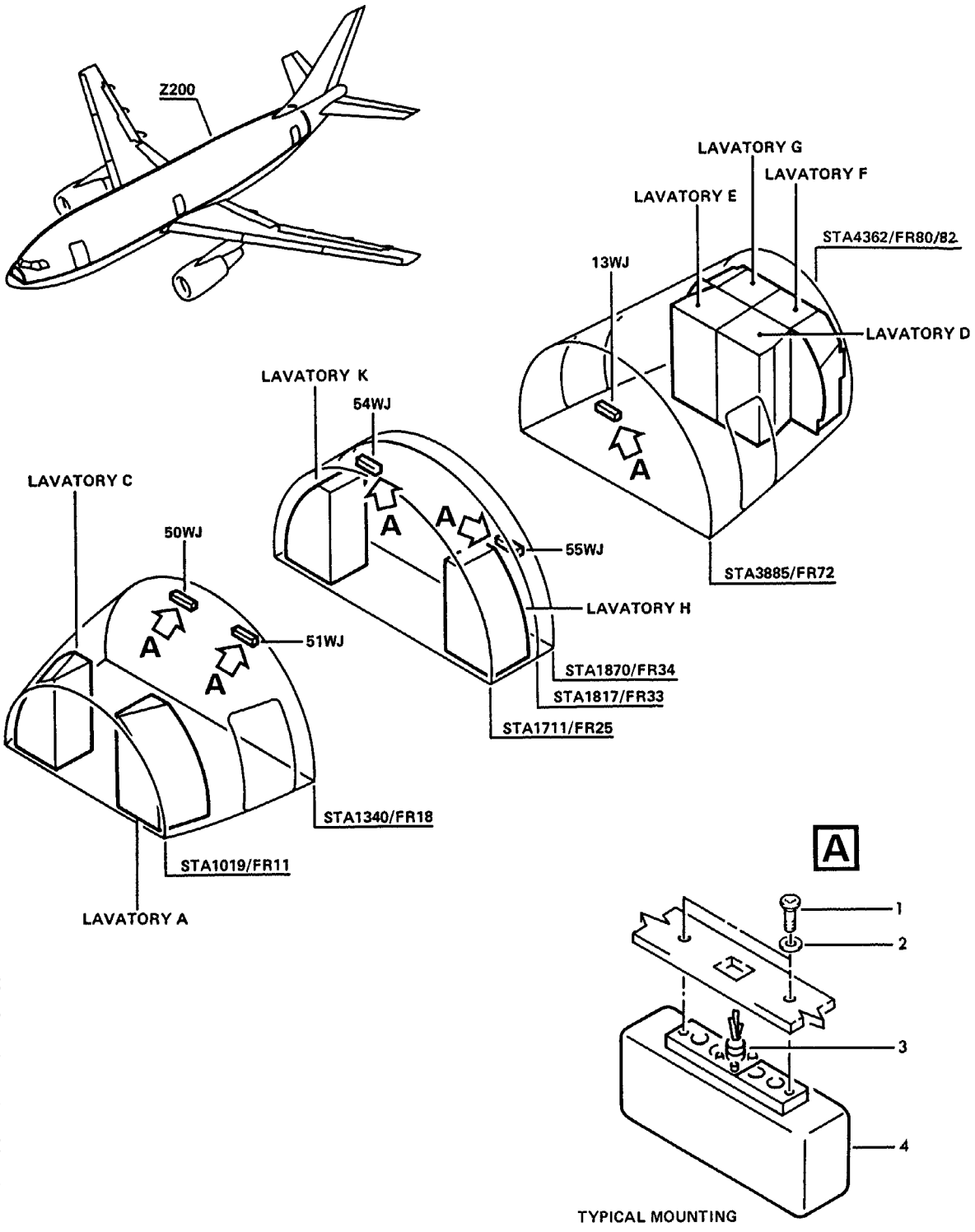
(Ref. Fig. 401)

R **ON A/C 101-200,

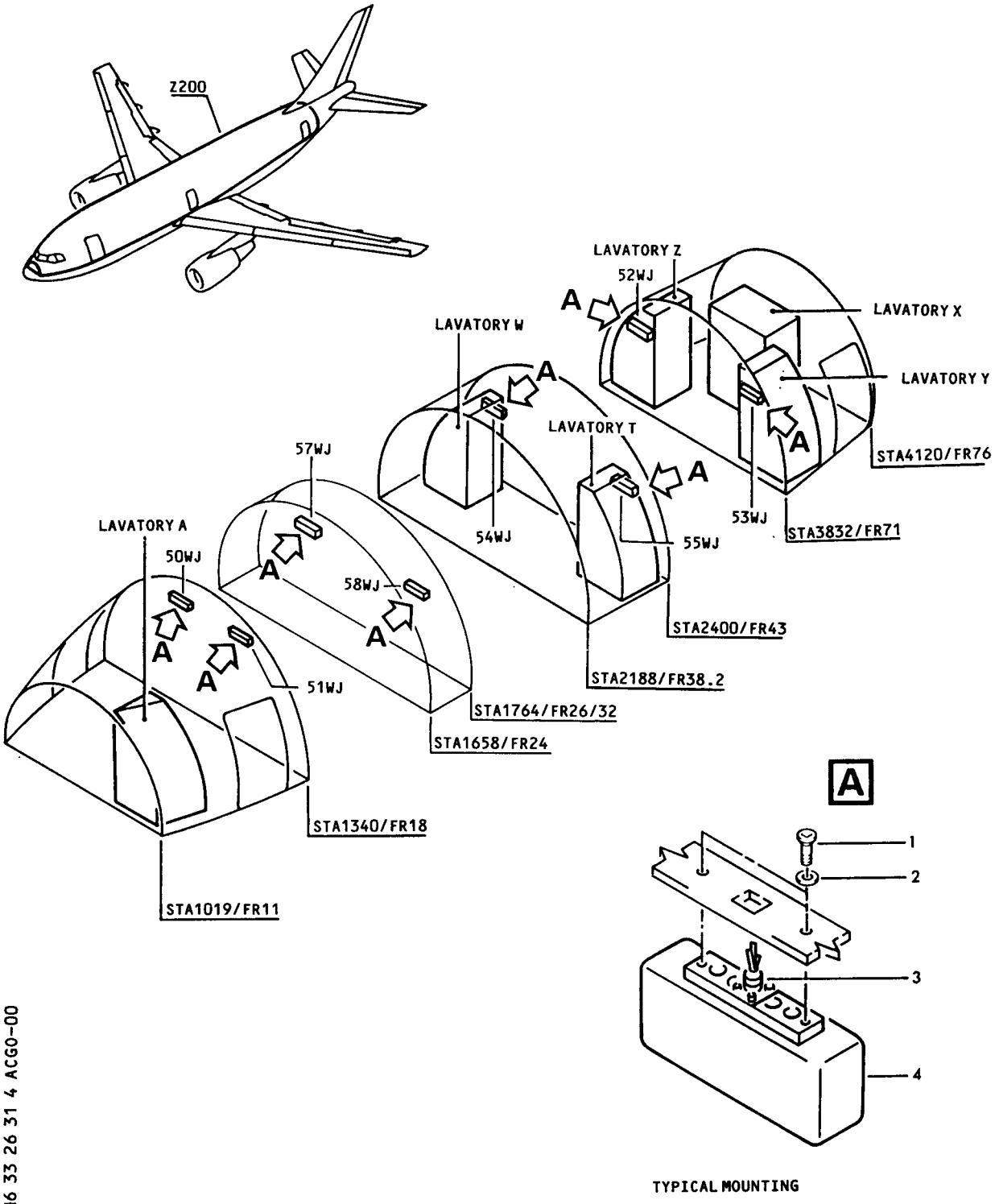
R (Ref. Fig. 402)

R **ON A/C ALL

D. Test of LAVATORY OCCUPIED Signs
NOTE : The lavatory doors may be locked or unlocked externally by inserting a suitable tool into the mechanical OCCUPIED sign in the door and moving the sign in the required direction (Ref. 25-40-00, P. Block 1).
(1)Connect the electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(2)Remove safety clips and tags, and close circuit breakers 1WJ and 11WJ.
(3)Check that the LAVATORY indication of the sign comes on.



Lavatory/Occupied Sign (Typical Mounting)
Figure 401



Lavatory/Occupied Sign (Typical Mounting)
Figure 402

R

(4)Carry out the following test:

ACTION	RESULT
1. At Lavatories: - at relevant lavatory close and lock door. - at relevant lavatory unlock and open door.	In **LAVATORY OCCUPIED** sign: - relevant **OCCUPIED** sign comes on. In **LAVATORY OCCUPIED** sign: - relevant **OCCUPIED** sign goes off.
2. On panel 800VU and 811VU: - open circuit breakers **LAVATORY 1WJ** and **LAVATORY 11WJ**.	In **LAVATORY OCCUPIED** signs: - **TOILET** signs go off.

E. Close-Up

(1)De-energize the aircraft electrical network and disconnect the elecrical ground power unit (Ref. 24-41-00, P. Block 301).

(2)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.

(3)Remove stepladder.

CABIN ATTENDANT WORK LIGHTS
DESCRIPTION AND OPERATION

1. General

The system provides lighting for the cabin attendant stations.

2. Component Location

R **ON A/C 001-100,

(Ref. Fig. 001)

R **ON A/C 101-200,

R (Ref. Fig. 002)

R **ON A/C 001-100,

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF.
2LZ	SWITCH		841		
3LZ	SWITCH		831		
4LZ	LIGHT-WORK		841		33-27-11
5LZ	LIGHT-WORK		831		33-27-11
7LZ	LIGHT-WORK		831		33-27-11
13LZ	SWITCH		831		
16LZ	SWITCH		841		
18LZ	LIGHT-WORK		841		33-27-11
29LZ	LIGHT-WORK		831		33-27-11
30LZ	SWITCH		262		
31LZ	SWITCH		831		
32LZ	LIGHT-WORK		262		33-27-11
33LZ	SWITCH		261		
34LZ	LIGHT-WORK		843		
35LZ	LIGHT-WORK		261		33-27-11
36LZ	SWITCH		843		
42LZ	LIGHT-WORK	742VU	230		33-27-11
43LZ	LIGHT-WORK	742VU	230		33-27-11
46LZ	LIGHT-WORK	742VU	230		33-27-11

R **ON A/C 101-200,

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF.
2LZ	SWITCH		841		
3LZ	SWITCH		831		
4LZ	LIGHT-WORK		841		33-27-11

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF.
5LZ	LIGHT-WORK		831		33-27-11
7LZ	LIGHT-WORK		831		33-27-11
13LZ	SWITCH		831		
25LZ	SWITCH	892VU	243		
26LZ	SWITCH	897VU	244		
27LZ	LIGHT-WORK	892VU	243		33-27-11
28LZ	LIGHT-WORK	897VU	244		33-27-11
29LZ	LIGHT-WORK		831		33-27-11
31LZ	SWITCH		831		
45LZ	SWITCH	892VU	243		
46LZ	SWITCH	897VU	244		
47LZ	LIGHT-WORK	892VU	243		33-27-11
48LZ	LIGHT-WORK	897VU	244		33-27-11
62LZ	LIGHT-WORK	842VU	264		33-27-11
63LZ	LIGHT-WORK	843VU	263		33-27-11
64LZ	SWITCH		262		
66LZ	LIGHT-WORK	842VU	264		33-27-11
61LZ	SWITCH		261		
68LZ	SWITCH		262		
69LZ	SWITCH		261		
71LZ	LIGHT-WORK	843VU	263		33-27-11

**ON A/C ALL

3. Description

A. The system is split into two sections.
(1)The forward section is supplied from the busbar 601PP via circuit breaker 1LZ.
(2)The mid and aft sections are supplied from the busbar 102PP via circuit breaker 20LZ.

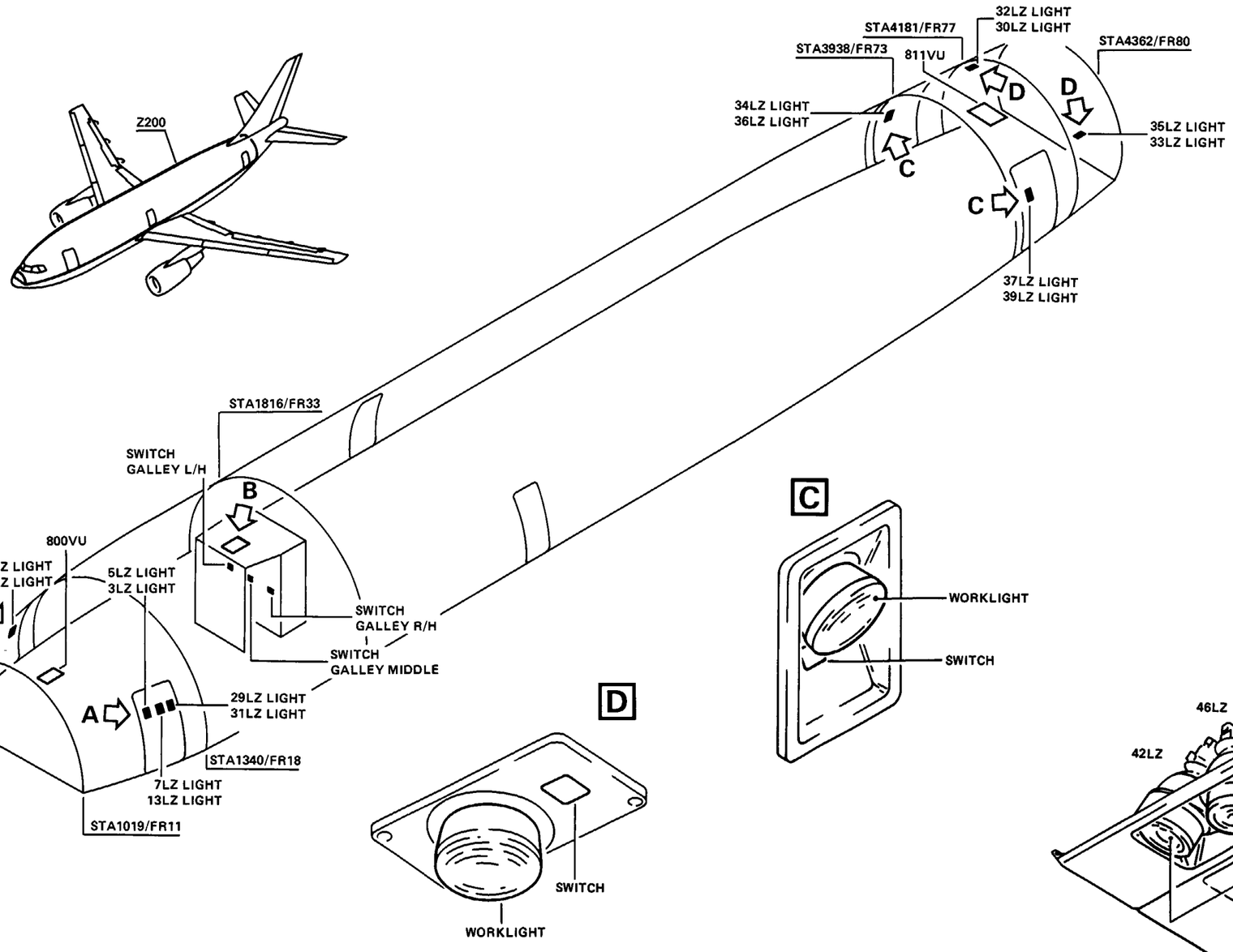
B. The system comprises worklights fitted adjacent to the attendant seats. The lights are controlled by pushbutton switches.

**ON A/C 001-100,

4. Operation (Ref. Fig. 003)

**ON A/C 101-200,

4. Operation (Ref. Fig. 004)



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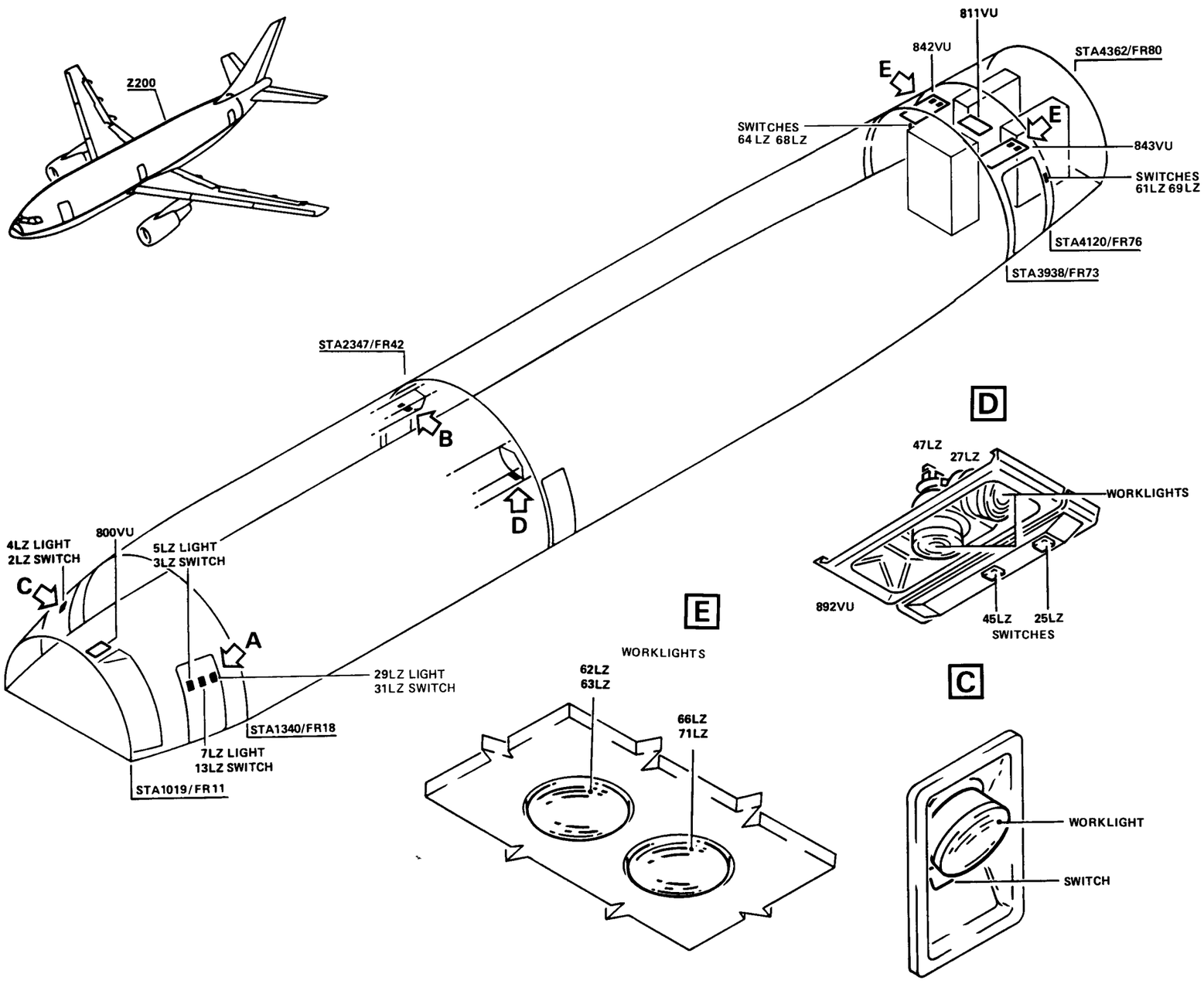
Attendant Work Lights - Component Locations
Figure 001



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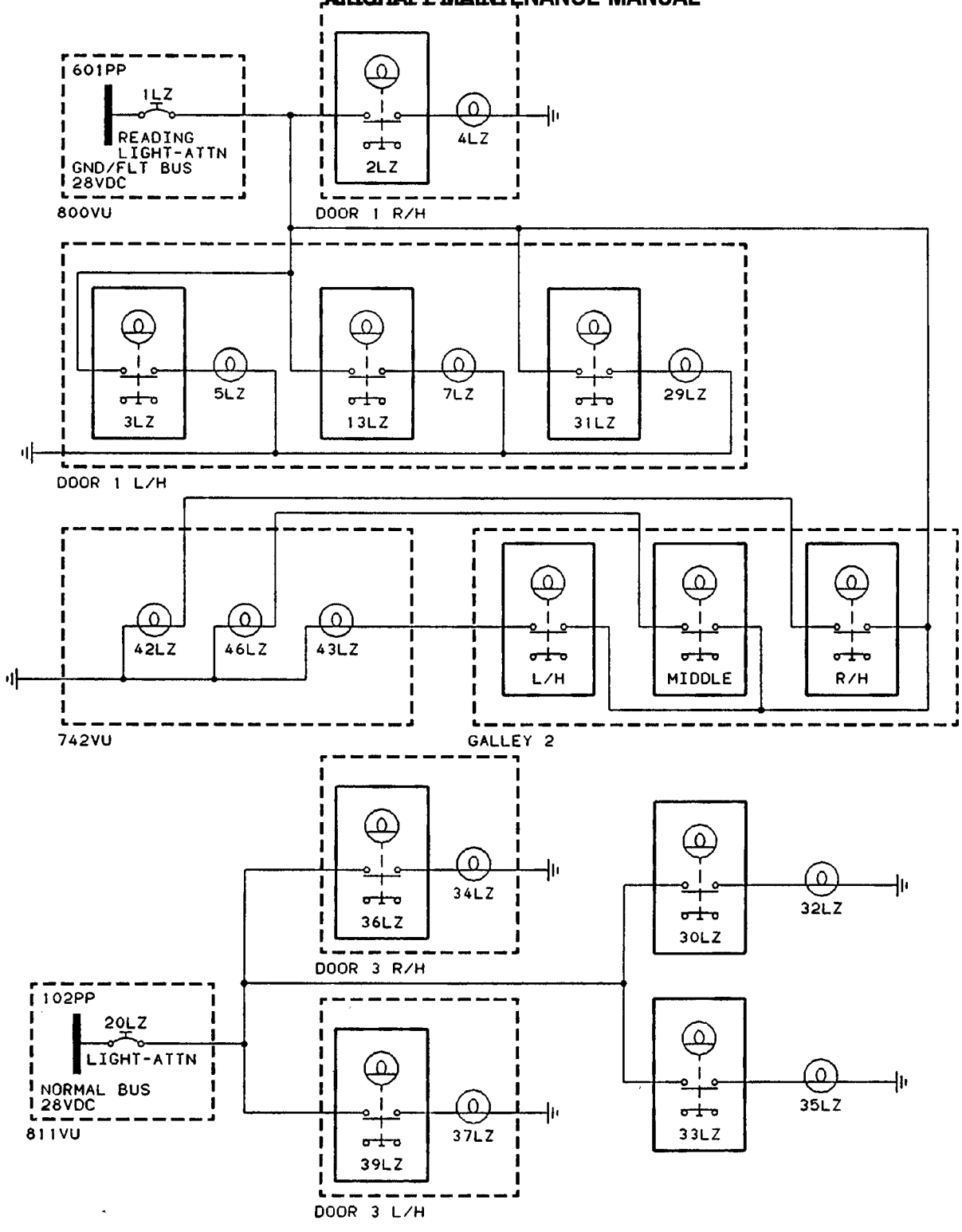
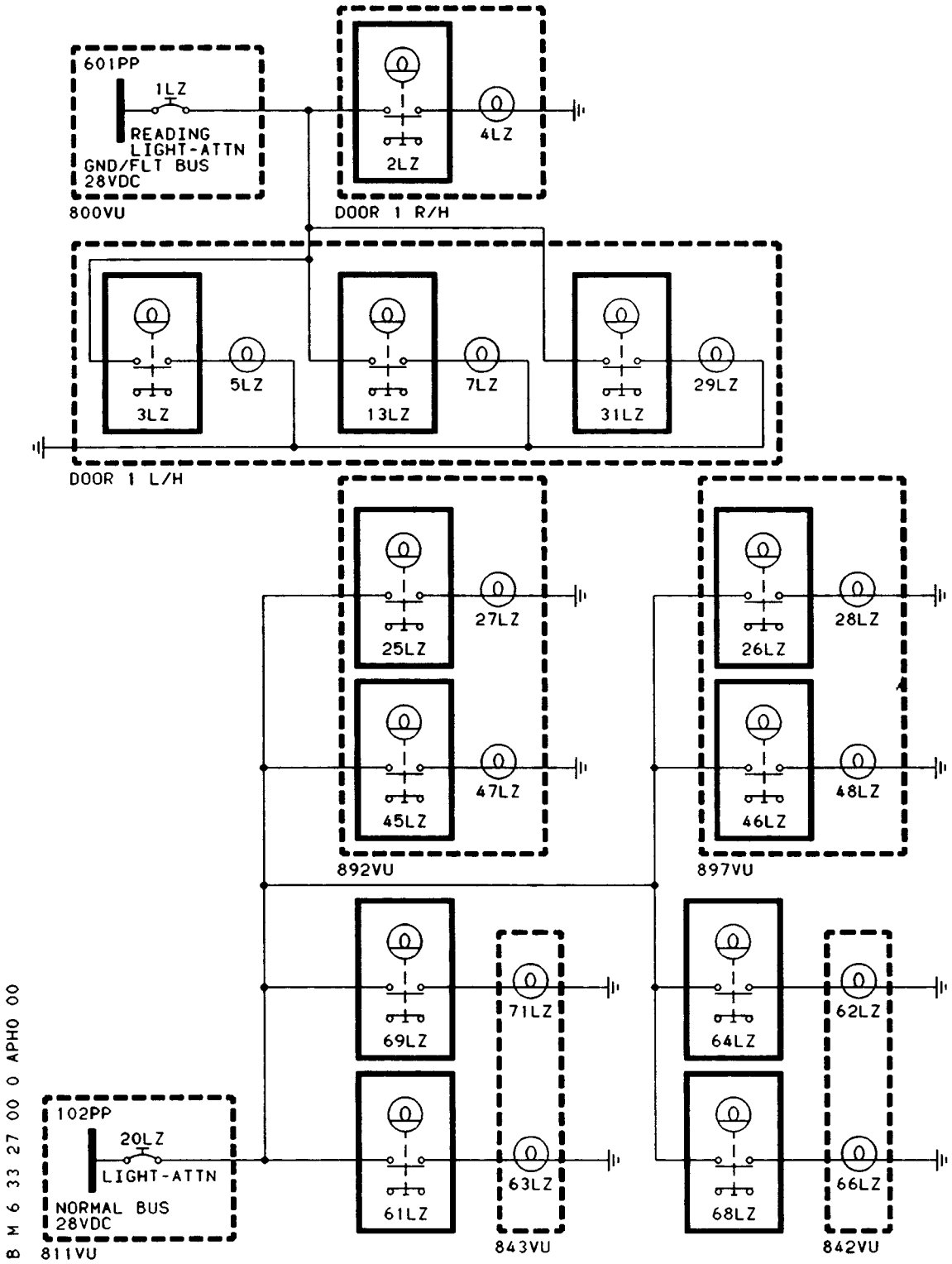
Attendant Work Lights - Component Locations
Figure 002



Attendant Work Lights - Schematic
Figure 003



Attendant Work Lights - Schematic
Figure 004

R

R **ON A/C ALL

A. 28 V DC is supplied to the switches when the busbars 601PP and 102PP are energized and the circuit breakers 1LZ and 20LZ are closed.

B. Operation of the attendant work lights are controlled by their respective switches.

CABIN ATTENDANT WORK LIGHT - ADJUSTMENT/TEST

1. Operational Test

A. Reason for the Job
Test of Work Lights

B. Equipment and Materials

ITEM	DESIGNATION
(1)	Electrical Ground Power Unit - 3-Phase, 115/200 V, 400 Hz

Referenced Procedure

- 24-41-00, P. Block 301	AC External Power Control

C. Procedure
(1)Job Set-Up
(a)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(b)Make certain that electronics racks ventilation is correct.
(c)Make certain that the following circuit breakers are closed:

PANEL	SERVICE	IDENT.	LOCATION
800VU	READING LIGHT/ATTN	1LZ	C13
811VU	LIGHT ATTN	20LZ	B10

R **ON A/C 001-100,

(2)Test

ACTION	RESULT
1. Zone 831: - press pushbutton switches 3LZ, 13LZ and 31LZ. - press pushbutton switches 3LZ, 13LZ and 31LZ again.	Zone 831: - attendant work lights 5LZ, 7LZ and 29LZ come on. - attendant work lights 5LZ, 7LZ and 29LZ go off.
2. Zone 841: - press pushbutton switches 2LZ and 16LZ. - press pushbutton switches 2LZ and 16LZ again.	Zone 841: - attendant work lights 4LZ and 18LZ come on. - attendant work lights 4LZ and 18LZ go off.
3. Galley 2: - press LH, middle and RH pushbutton switches. - press LH, middle and RH pushbutton switches again.	Panel 742VU, zone 230: - attendant work lights 42LZ, 43LZ and 46LZ come on. - attendant work lights 42LZ, 43LZ and 46LZ go off.
4. Zone 833:	Zone 833:

ACTION	RESULT
- press pushbutton switch 39LZ. - press pushbutton switch 39LZ again.	- attendant work light 37LZ comes on. - attendant work light 37LZ goes off.
5. Zone 843: - press pushbutton switch 36LZ. - press pushbutton switch 36LZ again.	Zone 843: - attendant work light 34LZ comes on. - attendant work light 34LZ goes off.
6. Zone 263: - press pushbutton switch 33LZ. - press pushbutton switch 33LZ again.	Zone 263: - attendant work light 35LZ comes on. - attendant work light 35LZ goes off.
7. Zone 264: - press pushbutton switch 30LZ. - press pushbutton switch 30LZ again.	Zone 264: - attendant work light 32LZ comes on. - attendant work light 32LZ goes off.

R **ON A/C 101-200,

R (2)Test

ACTION	RESULT
1. Zone 831: - press pushbutton switch 31LZ. - press pushbutton switch 31LZ again. - press pushbutton switch 13LZ. - press pushbutton switch 13LZ again. - press pushbutton switch 3LZ. - press pushbutton switch 3LZ again.	Zone 831: - attendant work light 29LZ comes on. - attendant work light 29LZ goes off. - attendant work light 7LZ comes on. - attendant work light 7LZ goes off. - attendant work light 5LZ comes on. - attendant work light 5LZ goes off.
2. Zone 841: - press pushbutton switch 2LZ. - press pushbutton switch 2LZ again.	Zone 841: - attendant work light 4LZ comes on. - attendant work light 4LZ goes off.
3. Zone 243 - Panel 892VU: - press pushbutton switch 25LZ. - press pushbutton switch 25LZ again. - press pushbutton switch 45LZ. - press pushbutton switch 45LZ again.	Zone 243 - Panel 892VU: - attendant work light 27LZ comes on. - attendant work light 27LZ goes off. - attendant work light 47LZ comes on. - attendant work light 47LZ goes off.
4. Zone 244 - Panel 897VU: - press pushbutton switch 26LZ. - press pushbutton switch 26LZ again. - press pushbutton switch 46LZ. - press pushbutton switch 46LZ again.	Zone 244 - Panel 897VU: - attendant work light 28LZ comes on. - attendant work light 28LZ goes off. - attendant work light 48LZ comes on. - attendant work light 48LZ goes off.
5. Zone 261: - press pushbutton switch 61LZ. - press pushbutton switch 61LZ again. - press pushbutton switch 69LZ. - press pushbutton switch 69LZ again.	Zone 263 - 843VU: - attendant work light 63LZ comes on. - attendant work light 63LZ goes off. - attendant work light 71LZ comes on. - attendant work light 71LZ goes off.
6. Zone 262:	Zone 264 - 842VU:

ACTION	RESULT
- press pushbutton switch 68LZ.	- attendant work light 66LZ comes on.
- press pushbutton switch 68LZ again.	- attendant work light 66LZ goes off.
- press pushbutton switch 64LZ.	- attendant work light 62LZ comes on.
- press pushbutton switch 64LZ again.	- attendant work light 62LZ goes off.

**ON A/C ALL

(3)Close-Up
(a)De-energize aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).

CABIN ATTENDANT READING LIGHT - REMOVAL/INSTALLATION

1. Equipment and Materials

ITEM	DESIGNATION
A.	Electrical Ground Power Unit - 3-Phase, 115/200 V, 400 Hz
R B. 8PE004363-00 or 8PE004363-10	Adjusting Device

Referenced Procedures

- 24-41-00, P. Block 301	AC External Power Control
- 25-25-00, P. Block 1	Passenger Service Units (if work lights installed)
- 25-23-13, P. Block 401	Utility Area Ceiling Panels (if work lights installed)

2. Procedure

A. Job Set-Up
(1)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
800VU	READING LIGHT/ATTN	1LZ	C13
811VU	LIGHT/ATTN	20LZ	B10

**ON A/C 001-100,

B. Removal
(1)Insert a tool between light cover and panel and lever out light assembly, for lights at locations B.
(2)Remove screws and washers and lower light assembly, for lights at locations C.
(3)Disengage one side of passenger service unit, for lights at locations D (Ref. 25-25-00, P. Block 1).
(4)Disconnect two wires (1) from attendant reading light (2).
(5)Remove retaining ring (3).
(6)Remove attendant reading light (2).

C. Installation
(1)Install attendant reading light (2).
(2)Install retaining ring (3).
(3)Connect two wires (1) to attendant reading light (2).
(4)Install light assembly and make certain that assembly snaps into position, for lights at locations B.
(5)Install light assembly and secure with screws and washers, for lights at locations C.
(6)Close passenger service unit, for lights at locations D (Ref. 25-25-00, P. Block 1).

R **ON A/C 101-200,

B. Removal
(1)Insert a tool between light cover and panel and lever out light assembly, for lights at locations B.
(2)Disengage one side of passenger service unit, for lights at locations C (Ref. 25-25-00, P. Block 1).
(3)Disengage and open lower area ceiling panel cover, for lights at locations D (Ref. 25-23-13, P. Block 401).
(4)Disconnect two wires (1) from attendant reading light (2).
(5)Remove retaining ring (3).
(6)Remove attendant reading light (2).

C. Installation
(1)Install attendant reading light (2).
(2)Install retaining ring (3).
(3)Connect two wires (1) to attendant reading light (2).
(4)Install light assembly and make certain that assembly snaps into position, for lights at locations B.
(5)Close passenger service unit, for lights at locations C (Ref. 25-25-00, P. Block 1).
(6)Close lower area ceiling panel cover, for lights at locations D (Ref. 25-23-13, P. Block 401).

R **ON A/C 001-100,

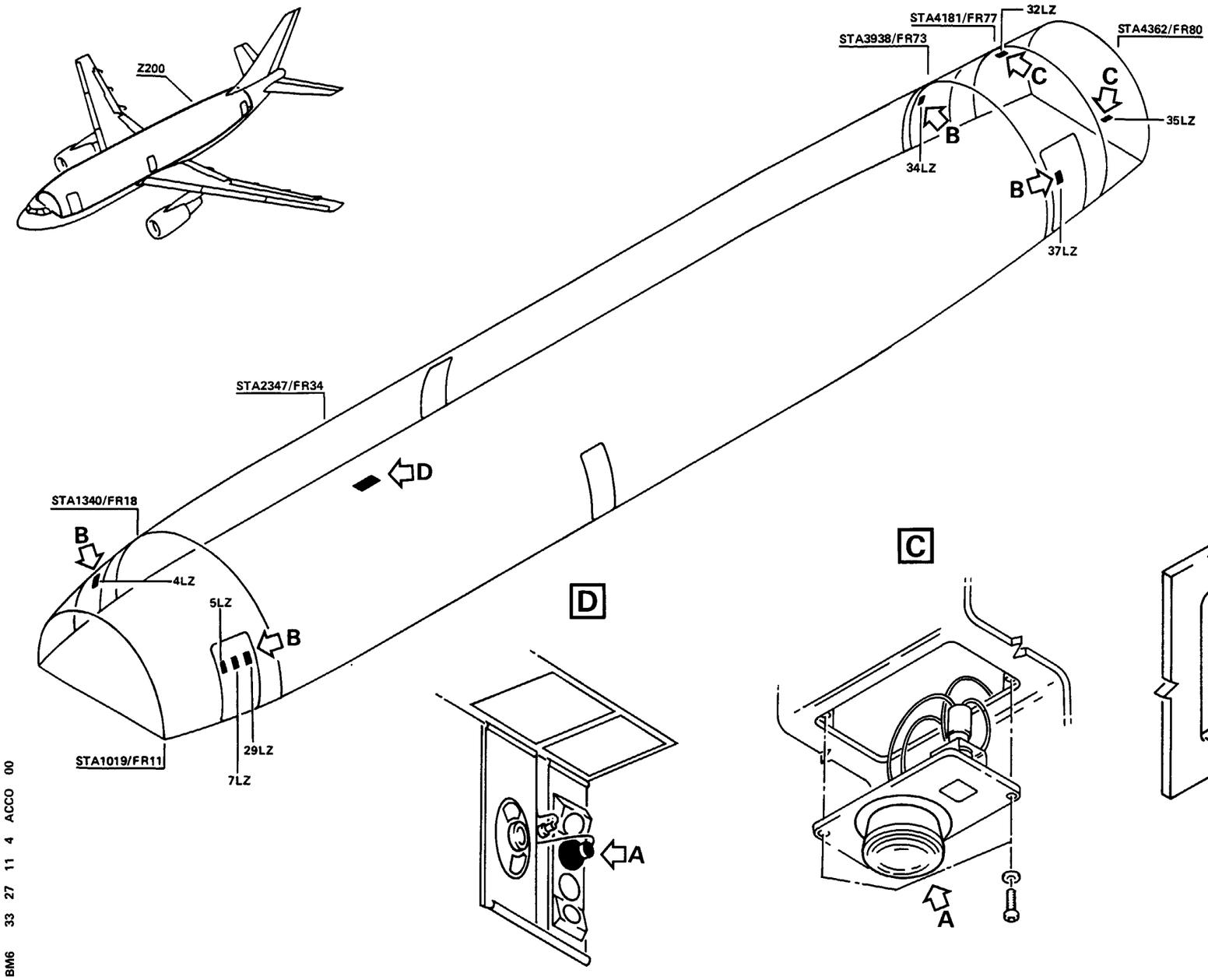
(Ref. Fig. 401)

R **ON A/C 101-200,

R (Ref. Fig. 402)

R **ON A/C ALL

D. Test of Work Light
NOTE : Light beam direction cannot be adjusted by attendant.
(1)Connect the electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(2)Make certain that electronics racks ventilation is correct.
(3)Remove safety clips and tags and close circuit breakers 1LZ and 20LZ.
(4)Remove lens (4).
(5)Install adjusting device (8) in housing assembly.
(6)Press the respective work light switch.
(7)Direct light beam to front edge of relevant attendant seat.
(8)Press respective pushbutton switch again.
(9)Remove adjusting device (8).
(10)Install lens (4).



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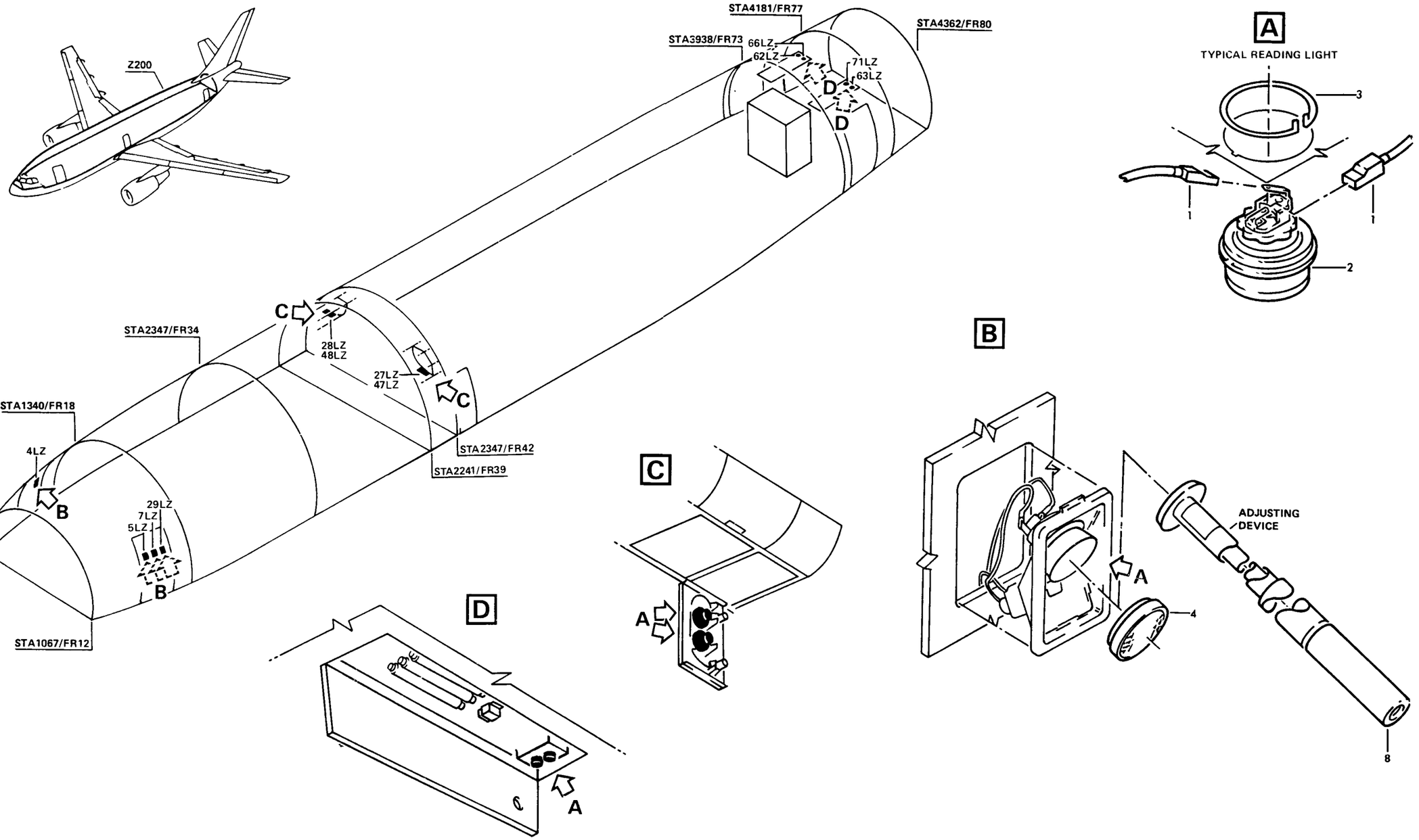
Cabin Attendant Work Lights
Figure 401



BM6 33 27 11 4 ACLO 00

Cabin Attendant Work Lights
Figure 402

R

E. Close-Up
(1)Make certain that the working area is clean and clear of tools and miscellaneous items of equipment.
(2)De-energize aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).

CARGO AND SERVICE COMPARTMENT LIGHTS - DESCRIPTION AND OPERATION

1. General

The cargo and service compartment lighting system is designed to provide adequate illumination of the service area, the air conditioning duct and accessory compartment.
The system also provides lighting for the FWD, AFT and BULK cargo compartment, the equipment compartment, and the wheel wells.

2. Description

The system consists of the following sub-systems:

A. Service Area Lighting (Ref. Fig. 001)

The service area lighting system comprises the lighting installation of the equipment compartment zone 311/312 and the APU compartment zone 315/316. Electrical sockets are provided for portable maintenance lights. The lights and sockets are supplied with 28V DC.

B. Air Conditioning Duct and Accessory Compartment Lighting (Ref. Fig. 001)

The system comprises the lighting installation of the air conditioning duct, zone 136 and the accessory compartment, zone 171. An electrical socket in zone 136 is provided for a portable maintenance light. The lights and the socket are supplied with 28V DC.

C. FWD, AFT and BULK Cargo Compartment Lighting (Ref. Fig. 002)

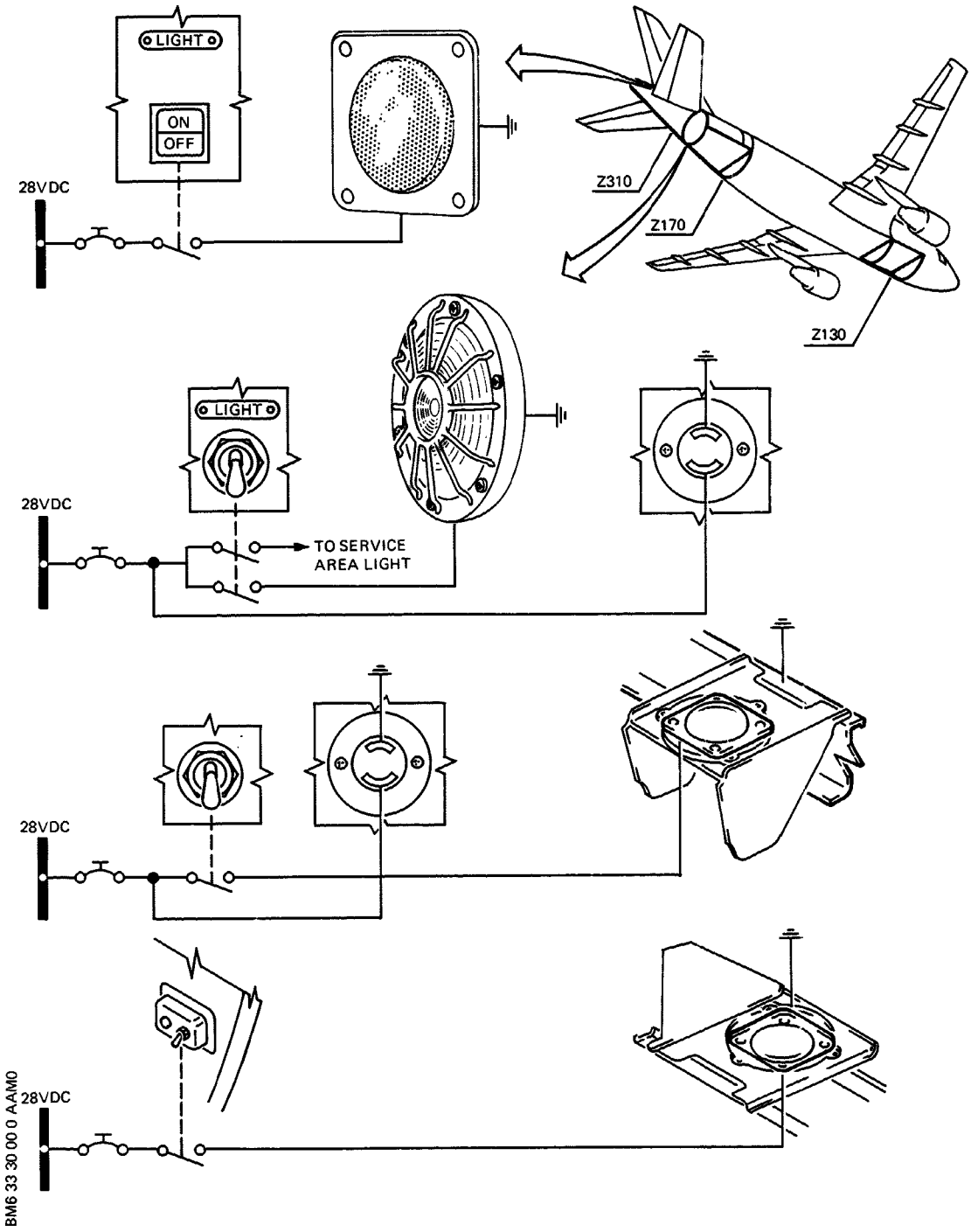
The system comprises the FWD, AFT and BULK Cargo Compartment ceiling lights and the Fwd and Aft cargo loading area lights. Electrical sockets are provided for portable maintenance lights. The lights and sockets are supplied with 28 V DC.

D. Equipment Compartment Lighting (Ref. Fig. 003)

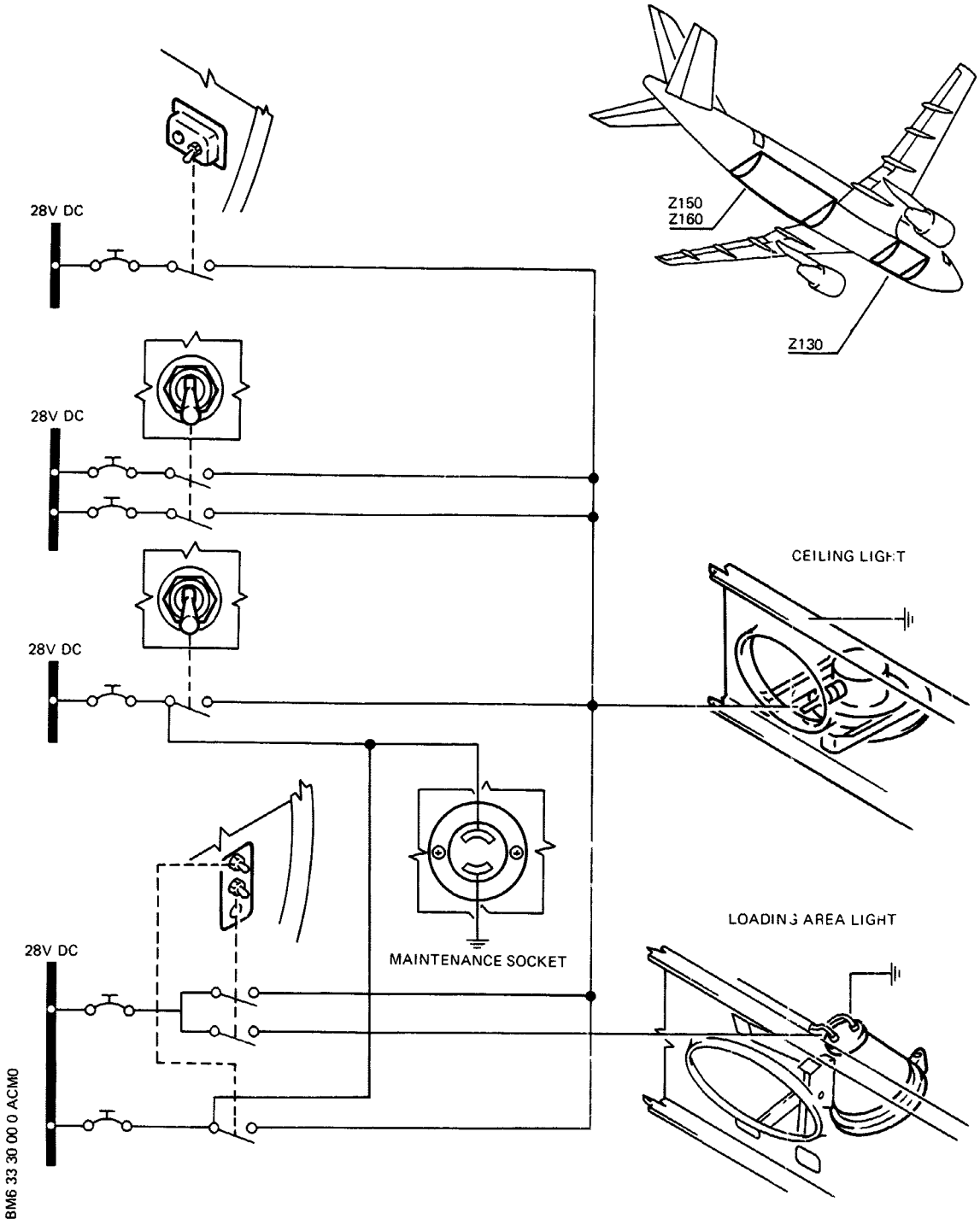
The system comprises the lighting installation of the air conditioning compartment and the electronic compartment. The air conditioning compartment lights are controlled by a on/off switch. The lights and socket are supplied with 28 V DC. The electronic compartment lights are controlled by a two way switching system supplied with 28 V DC from GND/FLT busbar. In an emergemcy a number of lights are disconnected by a relay change over circuit (if fitted). Both 28 V DC and 115 V AC sockets are installed.

E. Wheel Well Lighting (Ref. Fig. 004)

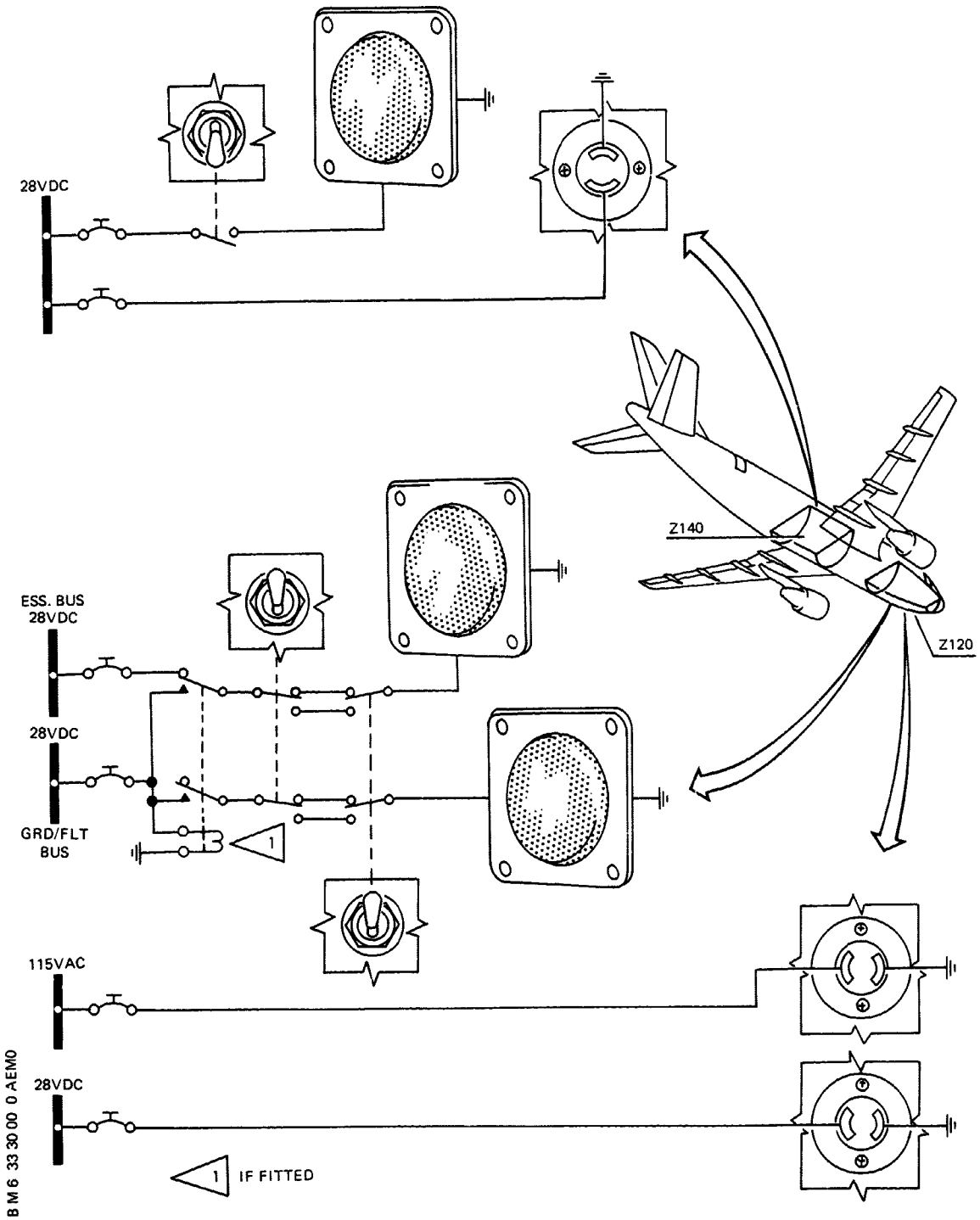
The system comprises the lighting installation of the wheel wells and the hydraulic compartment. The nose wheel well is controlled by a on/off switch and the LH and RH wheel well and hydraulic compartment are controlled by a two way switching system. Sockets are installed in the nose wheel well and the hydraulic compartment. The lights and sockets are supplied with 28 V DC.



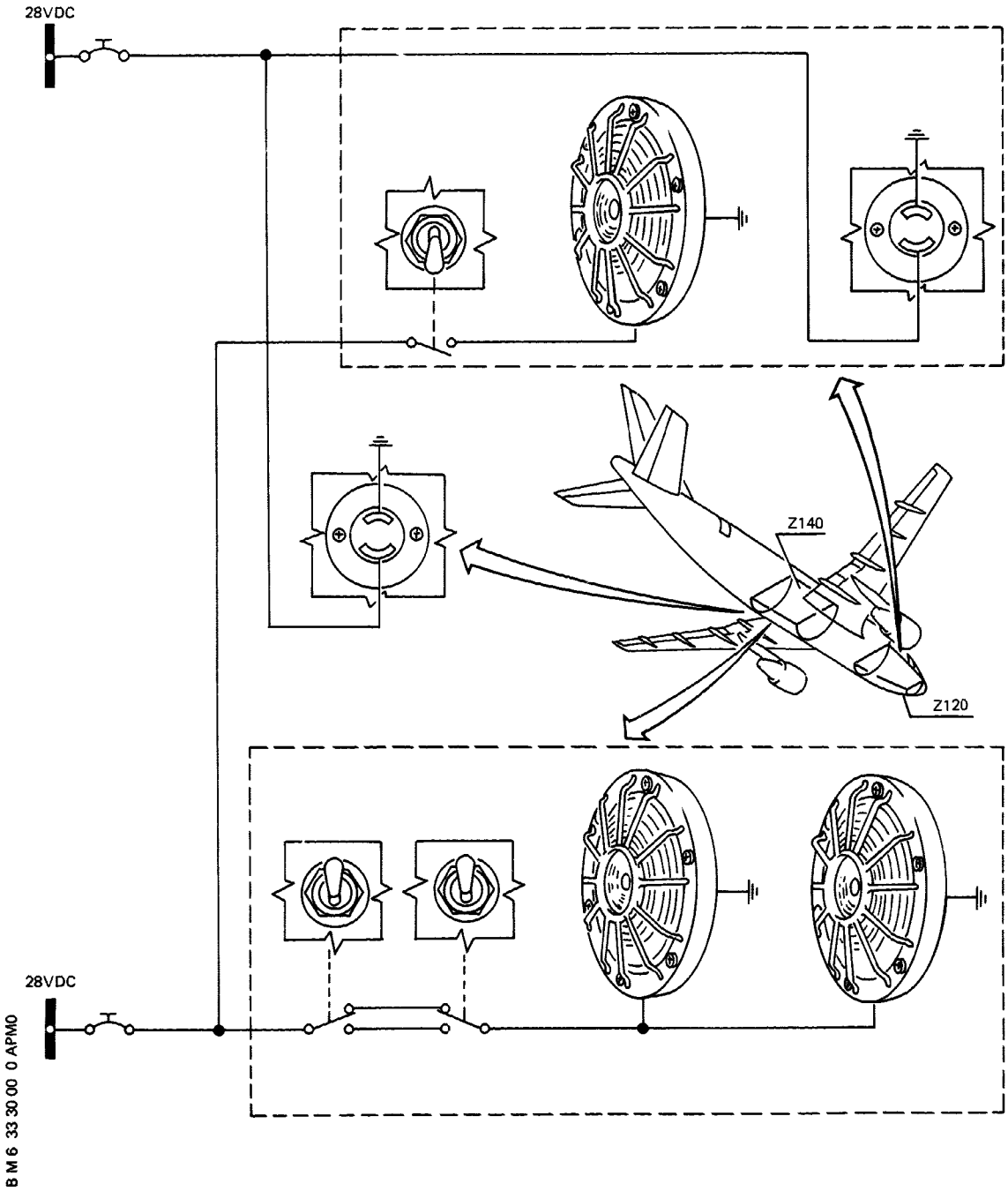
Service Area, Air Conditioning Duct and
Accessory Compartment Lighting
Figure 001



Cargo Compartment Lighting
Figure 002



Equipment Compartment Lighting
Figure 003



Wheel Well Lighting
Figure 004

SERVICE AREA LIGHTING - DESCRIPTION AND OPERATION

1. General

The service area lighting system comprises the lighting installation of the equipment compartment zone 311/312 and the APU compartment zone 315/316. Electrical sockets are provided for portable maintenance lights.

2. Component Location

(Ref. Fig. 001)

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	REF.	ATA
3LJ	SWITCH LIGHT		313			
4LJ	LIGHT		315			33-31-21
5LJ	LIGHT		315			33-31-21
6LJ	SOCKET		312			
7LJ	SOCKET		311			
8LJ	SOCKET		313			
11LJ	SWITCH LIGHT		312			
14LJ	LIGHT		312			33-31-11
17LJ	LIGHT		311			33-31-11
18LJ	LIGHT		312			33-31-11
19LJ	LIGHT		311			33-31-11

3. Description

A. Equipment Compartment

(1) The compartment is fitted with lights 14LJ, 17LJ, 18LJ and 19LJ and electrical sockets 6LJ and 7LJ.

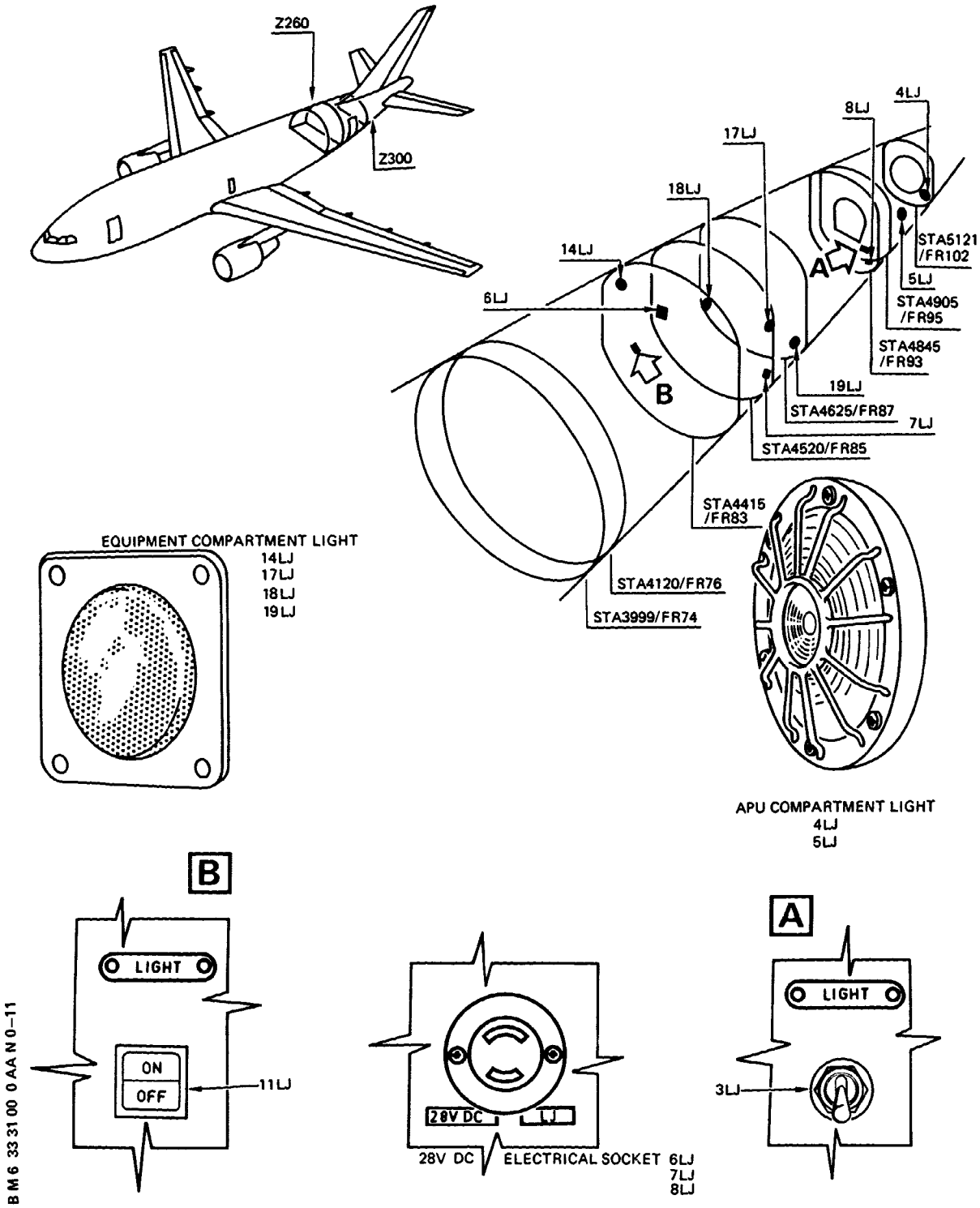
(2) The light circuit is protected by circuit breaker 10LJ and controlled by switch 11LJ.

(3) The electrical sockets circuit is protected by circuit breaker 1LJ.

B. APU Compartment

(1) The compartment is fitted with lights 4LJ and 5LJ. An electrical socket 8LJ, for the compartment, is also installed.

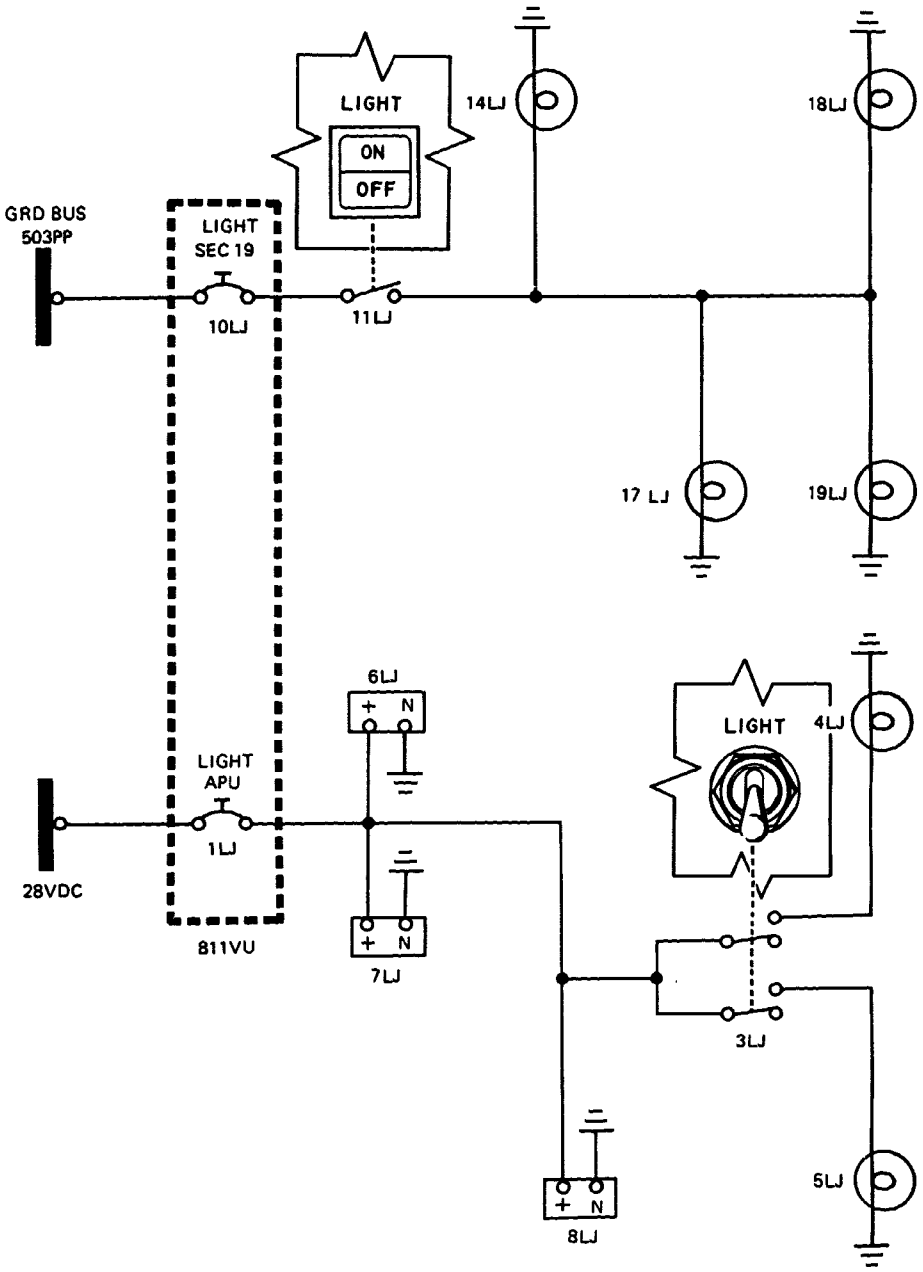
(2) The circuits are protected by circuit breaker 1LJ and the lights are controlled by switch 3LJ.



Service Area Lighting
Figure 001

4. Operation (Ref. Fig. 002)

A. When the 28V DC ground busbar 503PP is energized and the circuit breakers closed:
- 28V DC is available at the electrical sockets.
- The lights can be operated by placing the respective switch in the ON position.



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Service Area Lighting - Schematic
Figure 002

1. Operational Test

A. Reasons for the Job
(1)Operational test of accessory compartment lighting
(2)Operational test of APU compartment lighting

B. Equipment and Materials

ITEM	DESIGNATION
(1)	Electrical Ground Power Unit - 3-Phase, 115/200 V, 400 Hz
Referenced Procedure - 24-41-00, P. Block 301	AC External Power Control

C. Procedure
(1)Job Set-Up
(a)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(b)Make certain that the following circuit breakers are closed:

PANEL	SERVICE	IDENT.	LOCATION
811VU	LIGHT SEC 19	10LJ	B 11
811VU	LIGHT APU	1LJ	B 12

NOTE : 28V DC is available at all maintenance sockets.

D. Test
(1)Test accessory compartment lighting.

ACTION	RESULT
1. Zone 312: Press switch LIGHT (11LJ) to ON position.	Zone 311: - Service area lights 17LJ and 19LJ come on. Zone 312: - Service area lights 14LJ and 18LJ come on.
2. Zone 312: Press switch LIGHT (11LJ) to OFF position.	Zones 311 and 312: - All service area lights go off.

(2)Test APU compartment lighting.

ACTION	RESULT
1. Zone 313: Place toggle switch LIGHT (3LJ)	Zone 315: - APU inspection lights 4LJ and

ACTION	RESULT
in ON position.	5LJ come on.
2. Zone 313: Place toggle switch LIGHT (3LJ) in OFF position.	Zone 315: - APU inspection lights 4LJ and 5LJ go off.

E. Close-Up

(1) De-energize aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).

SERVICE AREA LIGHT FR80 TO 91 - REMOVAL/INSTALLATION

1. Equipment and Materials

ITEM	DESIGNATION
A.	Electrical Ground Power Unit - 3-Phase, 115/200 V, 400 Hz
B. Material No. 04-012	Common Greases (Ref. 20-31-00)
C. Material No. 07-001	Lacquers (Ref. 20-31-00)
Referenced Procedure	
- 24-41-00, P. Block 301	AC External Power Control

2. Procedure

(Ref. Fig. 401)

A. Job Set-Up

(1)Open, safety and tag the following circuit breaker:

PANEL	SERVICE	IDENT.	LOCATION
811VU	LIGHT/SEC 19	10LJ	B11

(2)Place pushbutton switch 11LJ in OFF position.

B. Removal

(1)Remove attachment screws (2), washers (3) and withdraw service light (1).
(2)Disconnect electrical connector (4).

C. Preparation of Replacement Component

(1)Make certain that contact surfaces are bright, bare metal.
(2)Apply grease (Mat. No. 04-012) to contact surfaces.

D. Installation

(1)Connect electrical connector (4).
(2)Position service light (1).
(3)Secure service light (1) with attachment screws (2) and washers (3).
(4)Remove exuded grease (Mat. No. 04-012) with a dry, clean, lint-free cloth.
(5)Coat the attachment screws surfaces with lacquer (Mat. No. 07-001).

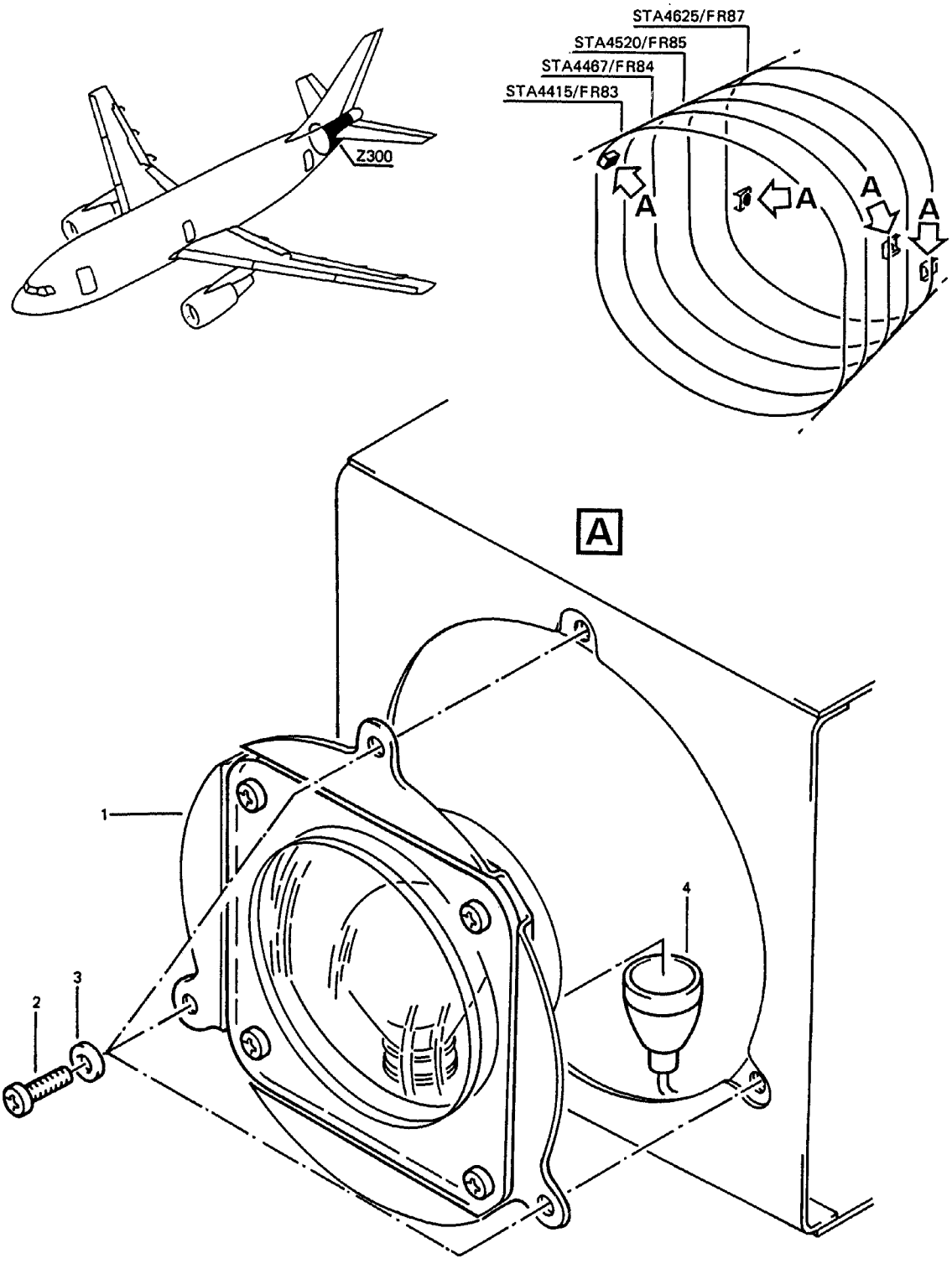
E. Test

(1)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(2)Remove safety clip and tag and close circuit breaker 10LJ.

ACTION	RESULT
1. Zone 312: - place switch LIGHT (11LJ) to ON position.	- service area light comes on.

ACTION	RESULT
- place switch to OFF position.	- service area light goes off.

F. Close-Up
(1)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(2)De-energize aircraft electrical network and disconnect ground power unit (Ref. 24-41-00, P. Block 301).



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Light - Service Area
Figure 401

APU SERVICE AREA LIGHT - REMOVAL/INSTALLATION

1. Equipment and Materials

ITEM	DESIGNATION
A.	Electrical Ground Power Unit - 3-Phase, 115/200 V, 400 Hz
Referenced Procedure - 24-41-00, P. Block 301	AC External Power Control

2. Procedure

(Ref. Fig. 401)

A. Job Set-Up

(1)Open, safety and tag the following circuit breaker:

PANEL	SERVICE	IDENT.	LOCATION
811VU	LIGHT/APU	1LJ	B12

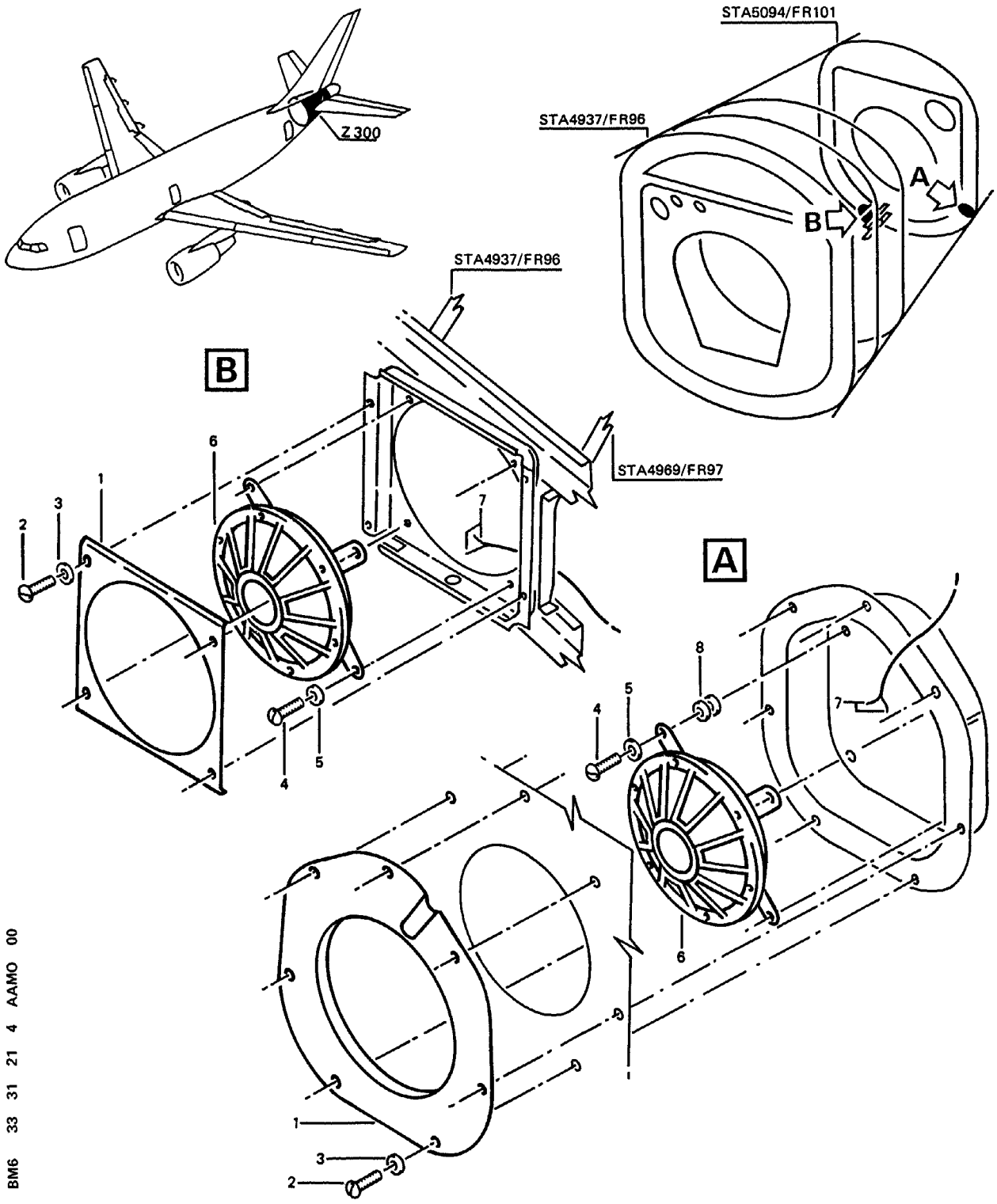
(2)Place switch 3LJ in OFF position.

B. Removal

(1)Remove attachment screws (2), washers (3) and withdraw coverplate (1).
(2)Remove attachment screws (4), washers (5) and distance pieces (8).
(3)Withdraw service light (6).
(4)Disconnect electrical connectors (7).

C. Installation

(1)Connect electrical connectors (7).
(2)Position service light (6).
(3)Secure service light (6) with attachment screws (4), washers (3) and distance pieces (8).
(4)Position coverplate (1) and install attachment screws (2) and washers (3).



Light - Service Area
Figure 401

D. Test
(1)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(2)Remove safety clip and tag and close circuit breaker 1LJ.

ACTION	RESULT
1. Zone 313:	
- place toggle switch LIGHT (3LJ) in ON position.	- APU inspection light comes on.
- place toggle switch to OFF position.	- APU inspection light goes off.

E. Close-Up
(1)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(2)De-energize aircraft electrical network and disconnect ground power unit (Ref. 24-41-00, P. Block 301).

AIR CONDITIONING DUCT AND ACCESSORY COMPARTMENT LIGHTING - DESCRIPTION AND OPERATION

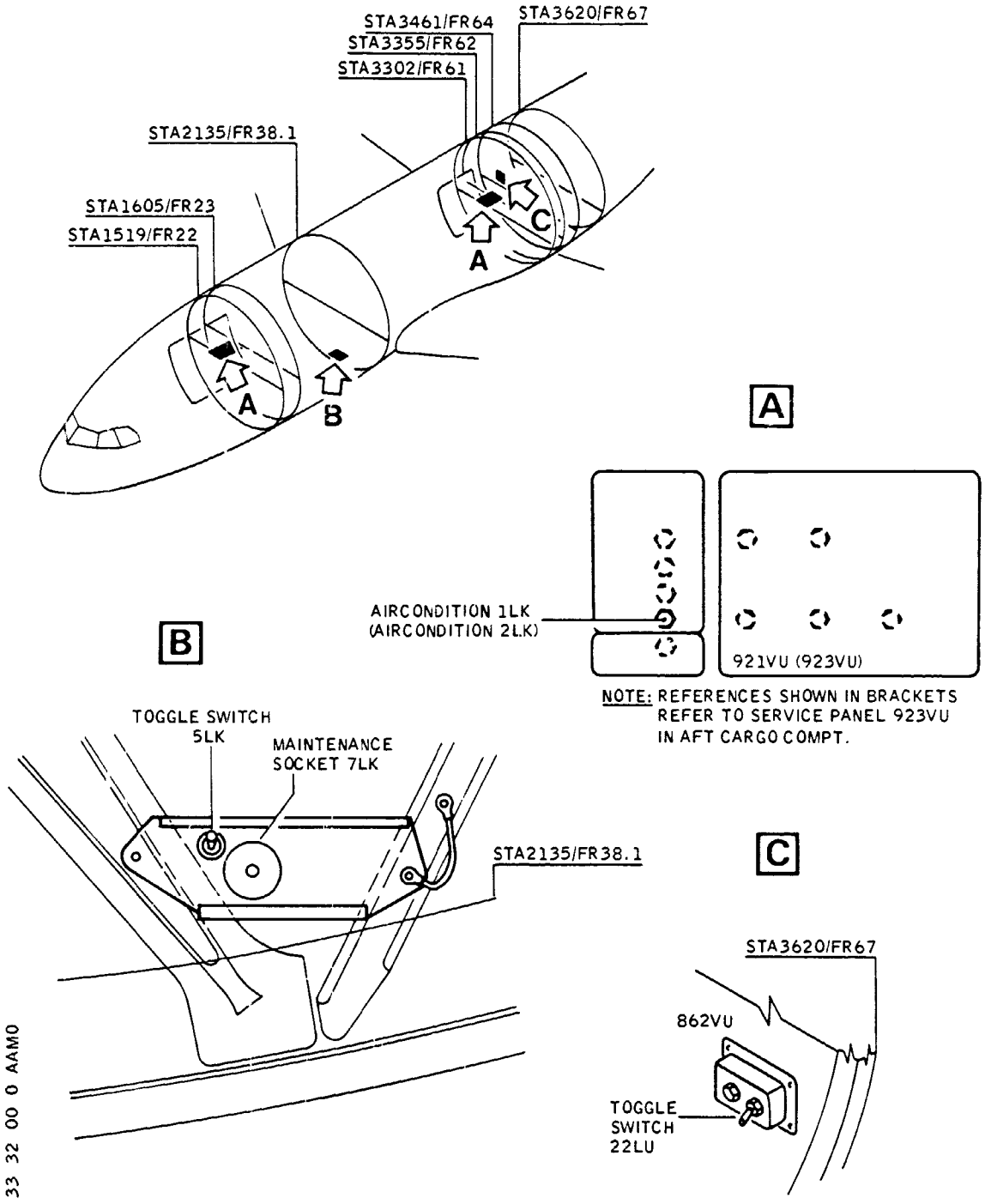
1. General

Illumination of the FWD air conditioning duct compartment is provided by light 3LK. The light is protected by circuit breaker 1LK on panel 921VU and controlled by toggle switch 5LK located in the FWD Cargo Compartment. The AFT air conditioning duct compartment and accessory compartment lighting is provided by lights 4LK and 6LK respectively. The lights are protected by circuit breaker 2LK on panel 923VU and controlled by toggle switch 22LU and relay 42LU located on service panel 862VU.

2. Component Location

(Ref. Fig. 001)

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF
3LK	MAINTENANCE LIGHT		136	136AR	33-32-00
4LK	MAINTENANCE LIGHT		171	171AZ	33-32-00
5LK	TOGGLE SWITCH		136	136AR	33-32-00
6LK	MAINTENANCE LIGHT		171	171AZ	33-32-00
7LK	MAINTENANCE SOCKET		136	136AR	33-32-00



Air Conditioning Duct and Accessory Compartment
Lighting - Component Location
Figure 001

3. System Description
(Ref. Fig. 002)

28VDC supplied from GND bus 505PP is routed via circuit breaker 1LK to toggle switch 5LK in the FWD cargo compartment. Selection of the switch to the ON (up) position will cause the floor-mounted light 3LK in the FWD air conditioning duct compartment to come on. 28VDC is also provided to maintenance socket 7LK located adjacent to the toggle switch when the circuit breaker is closed.
Power for the AFT air conditioning duct and accessory compartment lighting is provided by 28VDC GND bus 503PP via circuit breaker 2LK to toggle switch 22LU in the BULK cargo compartment. Selection of the switch to the ON position will cause the ceiling-mounted lights 4LK and 6LK in the AFT air conditioning duct and accessory compartment to come on.

4. Component Description

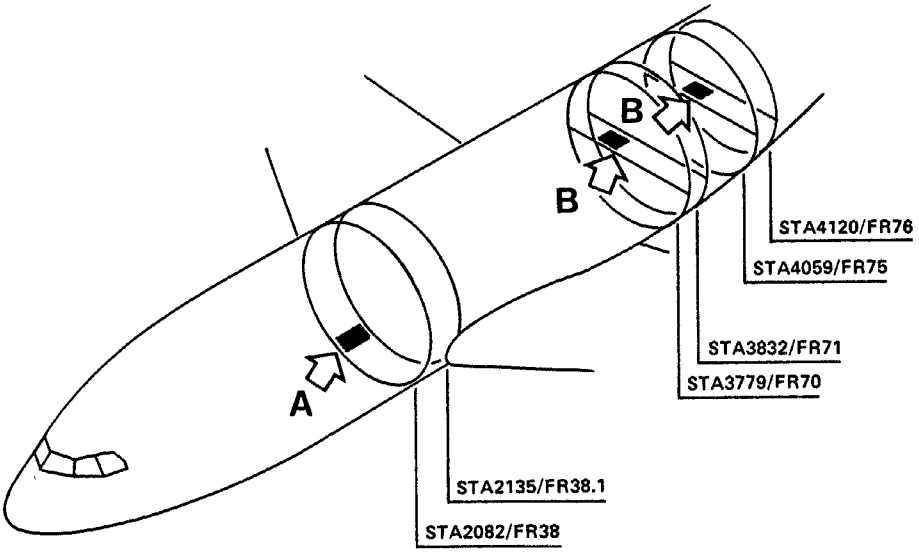
A. Lights (3LK, 4LK, 6LK)
Each light housing contains a rubber seal, a glass lens, and a cover plate with protective grill which enclose the 28VDC lamp. The power rating of lamp 3LK is 18W and lamps 4LK and 6LK are rated at 36W.
All component parts are replaceable and easily disassembled by unscrewing four quick-release fasteners.

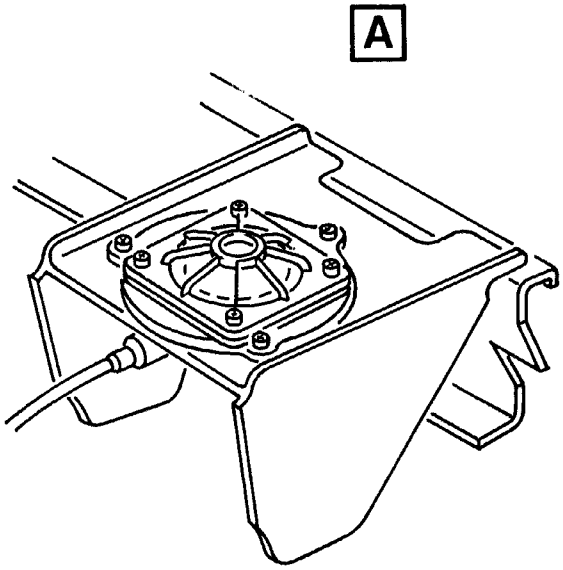
B. Toggle Switch (5LK)
Switch 5LK located in the FWD cargo compartment is a two position single pole switch. The switch is selected OFF in the down position and ON in the up position.

C. Maintenance Socket (7LK)
A two contact maintenance socket 7LK is located adjacent to toggle switch 5LK and provides 28VDC at 50W output.

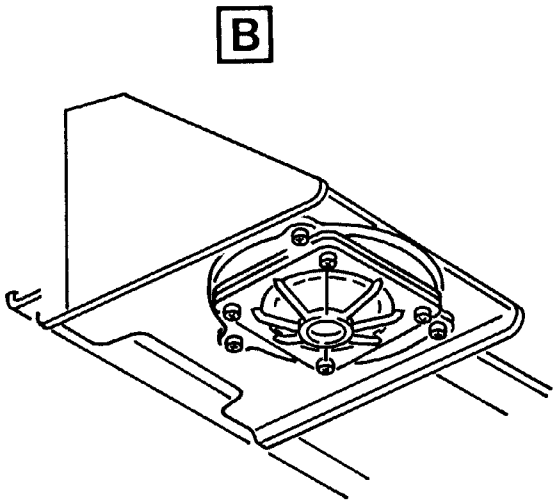
5. Operation
(Ref. Fig. 003)
The lights are supplied from busses 505PP (FWD) and 503PP (AFT). To operate the system, the aircraft must be on the ground (or jacked up), the aircraft electrical network energized and MAINT BUS switch located on the forward cabin attendant panel is selected ON. The following circuit breakers and toggle switches must be closed in order for the respective light(s) to come on.

ACTION	RESULT
1. Circuit breaker 1LK (921VU)	Power available at maintenance socket 7LK
2. Circuit breaker 1LK (921VU) and toggle switch 5LK	Maintenance light 3LK comes on
3. Circuit breaker 2LK (923VU) and toggle switch 22LU (862VU)	Maintenance lights 4LK and 6LK come on





MAINTENANCE LIGHT 3LK



MAINTENANCE LIGHT 4LK, 6LK

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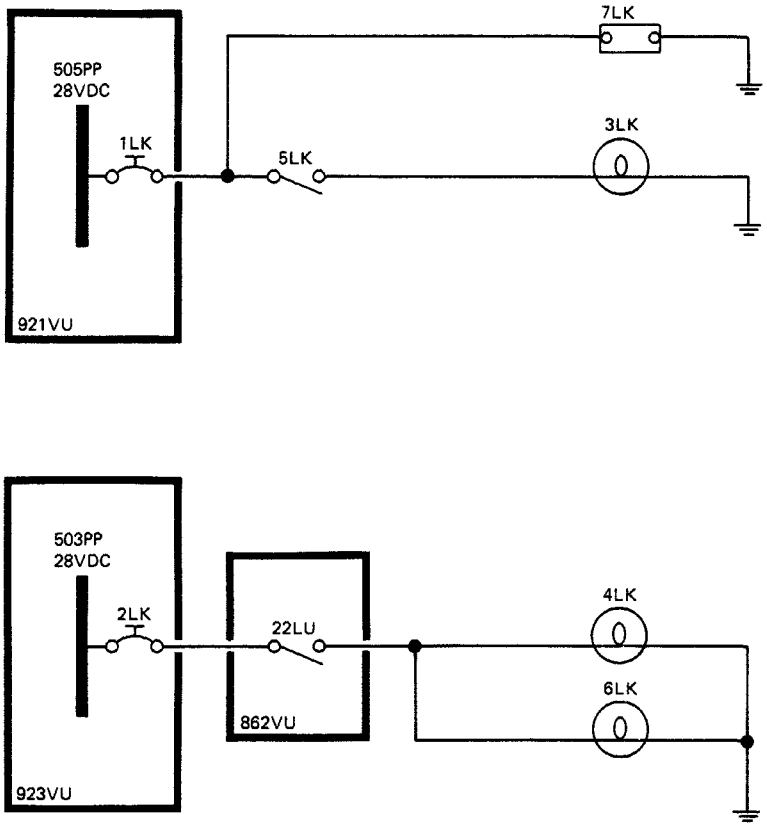
Air Conditioning Duct and Accessory Compartment
Lighting - Lights 3LK, 4LK and 6LK
Figure 002



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Air Conditioning Duct and Accessory Compartment
Lighting - Schematic
Figure 003

AIR CONDITIONING DUCT AND ACCESSORY COMPARTMENT LIGHTING - ADJUSTMENT/TEST

1. Operational Test

A. Reason for the Job
(1)Test of light 3LK in the air conditioning duct.
(2)Test of lights 4LK and 6LK in the accessory compartment.

B. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, (2.7 m (9 ft.) and 1.9 m (6.4 ft)
B.	Circuit Breaker Safety Clips and Tags

Referenced Procedures

- 24-41-00, P. Block 301	AC External Power Control
- 52-30-00, P. Block 1	Cargo Compartment Doors
- 52-30-00, P. Block 301	FWD and AFT Cargo Compartment Doors
- 52-34-00, P. Block 1	BULK Cargo Compartment Door

C. Procedure
(1)Job Set-Up
(a)Position access platform.
(b)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(c)Make certain that electronics racks ventilation is correct.
(d)Open FWD and/or AFT cargo compartment door(s) (Ref. 52-30-00, P. Block 1) or BULK cargo compartment door (Ref. 52-34-00, P. Block 1) as required.
(e)Install door actuator safety lock(s) to FWD and/or AFT cargo compartment door actuator(s) (Ref. 52-30-00, P. Block 301).
(f)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
101VU	ELEC-HYD PUMP	23GX	GEN2/B08
133VU	HYDRAULIC/ACCU PRESS CTL AND CARGO DOOR PUMP	7GX	333/T51

(g)For light 3LK position access platform and remove air conditioning compartment access door 136AR.
(h)For lights 4LK and 6LK open AFT cabin under floor compartment door 162AZ and plenum chamber door 171AZ.
(i)Make certain that the following circuit breakers are closed:

PANEL	SERVICE	IDENT.	LOCATION
921VU	AIR CONDITION	1LK	
923VU	AIR CONDITION	2LK	

(2)Test
(a)Test of maintenance light 3LK.

ACTION	RESULT
1. Place toggle switch 5LK in ON position.	Maintenance light 3LK comes on.
2. Place toggle switch 5LK in OFF position.	Maintenance light 3LK goes off.

(b)Test of maintenance lights 4LK and 6LK

ACTION	RESULT
1. Place toggle switch 22LU (862VU) in ON position.	Maintenance lights 4LK and 6LK come on.
2. Place toggle switch 22LU (862VU) in OFF position.	Maintenance lights 4LK and 6LK go off.

D. Close-Up
(1)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(2)Install air conditioning compartment access door 136AR and remove access platform.
(3)Close plenum chamber door 171AZ and AFT cabin under floor compartment door 162AZ.
(4)Remove safety clips and tags and close circuit breakers 7GX and 23GX.
(5)Remove door actuator safety lock(s) (Ref. 52-30-00, P. Block 301).
(6)Close FWD and/or AFT cargo compartment door(s) (Ref. 52-30-00, P. Block 1) or BULK cargo compartment door (Ref. 52-34-00, P. Bllock 1) as required.
(7)De-energize the aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).
(8)Remove access platform.

AIR CONDITIONING DUCT AND ACCESSORY COMPT. LIGHTING - SERVICING

1. Reason for the Job
   Replacement of defective lamp.

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platforms, 2.7 m (9 ft.) and 1.9 m (6.4 ft.)
B.	Circuit Breaker Safety Clips and Tags
C.	Lamp 28VDC
D.	Seal
E. Material No. 11-006	Cleaning Agents (Ref. 20-31-00)

Referenced Procedures

- 24-41-00, P. Block 301	AC External Power Control
- 52-30-00, P. Block 1	Cargo Compartment Doors
- 52-30-00, P. Block 301	FWD and AFT Cargo Compartment Doors
- 52-34-00, P. Block 1	BULK Cargo Compartment Door

3. Procedure

A. Job Set-Up
(1)Position access platform.
(2)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(3)Make certain that electronics racks ventilation is correct.
(4)Open FWD and/or AFT cargo compartment door(s) (Ref. 52-30-00, P. Block 1) or BULK cargo compartment door (Ref. 52-34-00, P. Block 1) as required.
(5)Install door actuator safety lock(s) to FWD and/or AFT cargo compartment door actuator(s) (Ref. 52-30-00, P. Block 301).
(6)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
921VU	AIR CONDITION	1LK	Z01
923VU	AIR CONDITION	2LK	W01
101VU	ELEC-HYD PUMP	23GX	GEN2/B08
133VU	HYDRAULIC/ACCU PRESS CTL AND CARGO DOOR PUMP	7GX	333/T51

(7)Place switch 5LK or 22LU to OFF position.
(8)For light 3LK position access platform and remove air conditioning compartment access door 136AR.
(9)For lights 4LK and 6LK open aft cabin under floor compartment door 162AZ and plenum chamber door 171AZ.

B. Removal

(1)Maintenance light 3LK
(Ref. Fig. 301)
(a)Release fasteners and remove and retain cover (1).
(b)Remove and retain lens (2), remove and discard seal (3).
(c)Remove and discard lamp (4) from light housing (5).
(2)Maintenance light 4LK or 6LK
(Ref. Fig. 302)
(a)Support light, release fasteners, remove and retain cover (1).
(b)Remove and retain lens (2), remove and discard seal (3).
(c)Remove and discard lamp (4) from light housing (5).

C. Preparation for Installation
(1)Inspect lens (2) and housing (5) for damage.
(2)Clean housing (5), lens (2) and cover (1) using Methyl Alcohol
(Material No. 11-006).

D. Installation
(1)Maintenance light 3LK
(a)Install lamp (4) in housing (5).
NOTE : Use 18 watt lamps only.
(b)Install seal (3), lens (2) and cover (1) lock fasteners.
(2)Maintenance lights 4LK and 6LK
(a)Install lamp (4) in housing (5).
(b)Install seal (3), lens (2) and cover (1) lock fasteners.
(c)Remove safety clips and tags and close circuit breakers 1LK and 2LK.

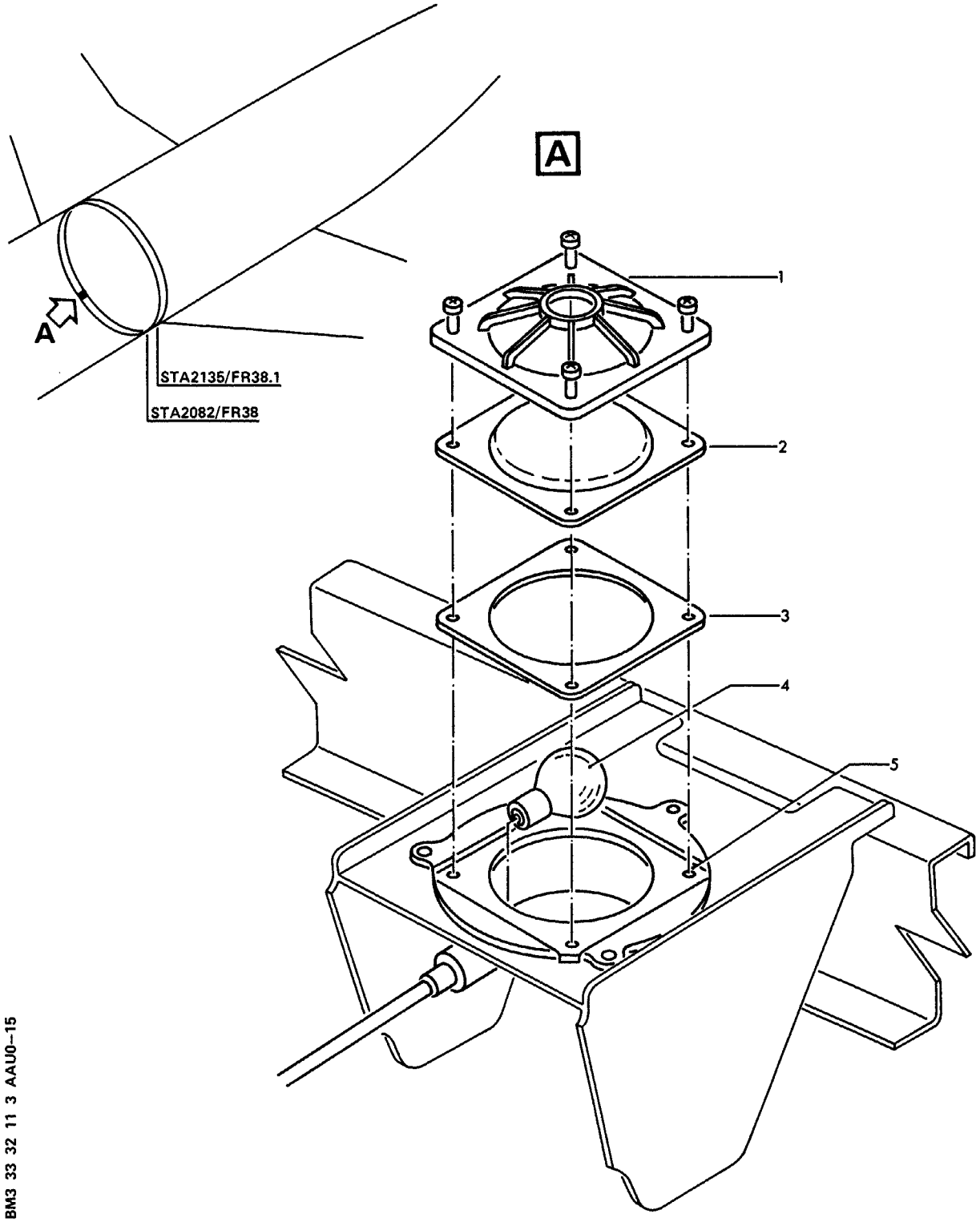
E. Test
Initial conditions:
- Correct electrical power supply (115 VAC, 28 VDC)
- Safety clips and tags removed and circuit breakers 1LK and 2LK closed.
(1)Test of maintenance light 3LK.

ACTION	RESULT
1. Place toggle switch 5LK in ON position.	Maintenance light 3LK comes on.
2. Place toggle switch 5LK in OFF position.	Maintenance light 3LK goes off.

(2)Test of maintenance lights 4LK and 6LK

ACTION	RESULT
1. Place toggle switch 22LU (862VU) in ON position.	Maintenance lights 4LK and 6LK come on.
2. Place toggle switch 22LU (862VU) in OFF position.	Maintenance lights 4LK and 6LK go off.

F. Close-Up



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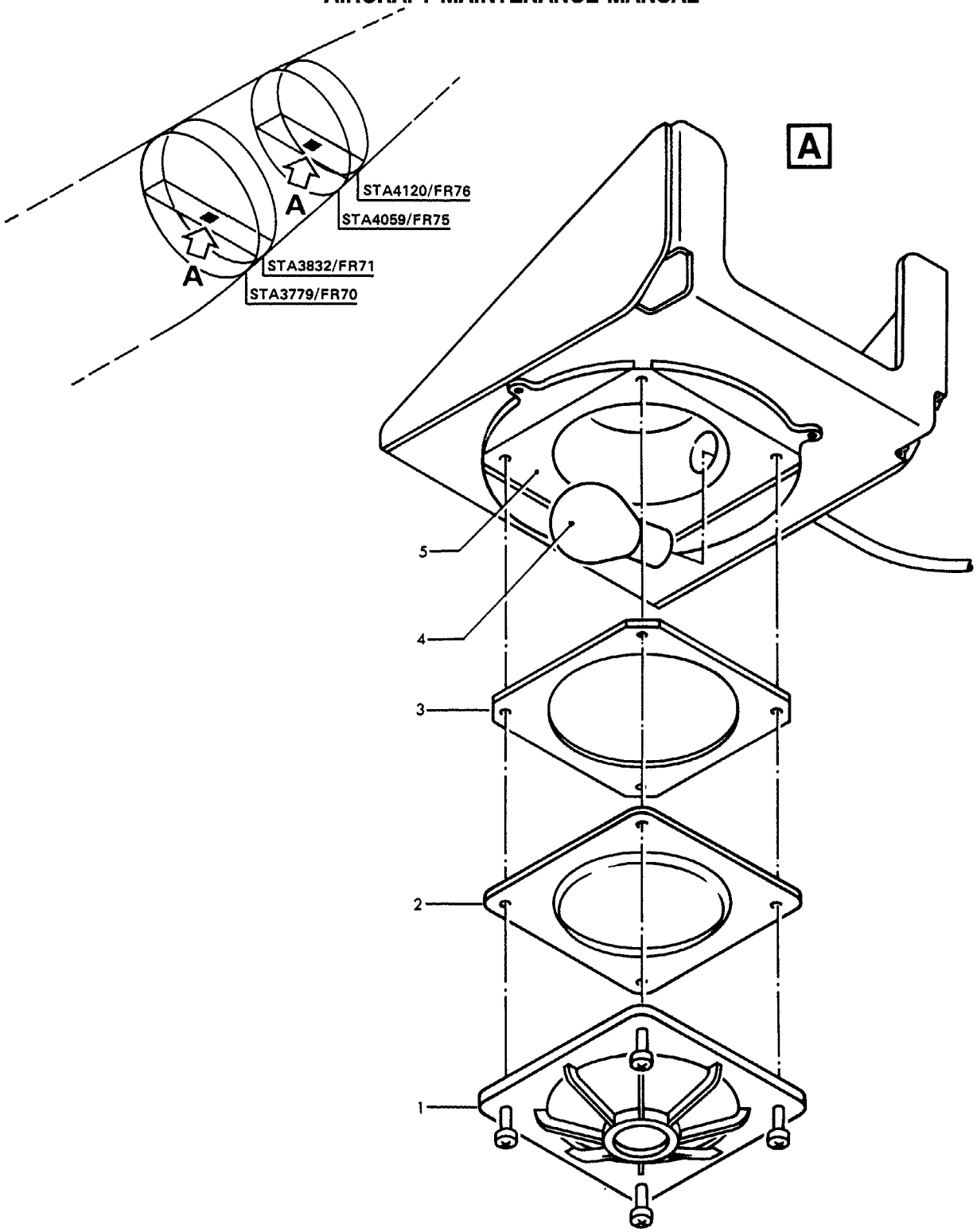
Maintenance Light 3LK
Figure 301



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Maintenance Lights 4LK, 6LK
Figure 302

(1)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(2)Install air conditioning compartment access door 136AR and remove access platform.
(3)Close plenum chamber door 171AZ and AFT cabin under floor compartment door 162AZ.
(4)Remove safety clips and tags and close circuit breakers 7GX and 23GX.
(5)Remove door actuator safety lock(s) (Ref. 52-30-00, P. Block 301).
(6)Close FWD and/or AFT cargo compartment door(s) (Ref. 52-30-00, P. Block 1) or BULK cargo compartment door (Ref. 52-34-00, P. Block 1) as required.
(7)De-energize the aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).
(8)Remove access platform.

AIR CONDITIONING DUCT AND ACCESSORY COMPT. LIGHTING - REMOVAL/INSTALLATION

1. Reason for the Job

A. Removal/Installation of the air conditioning duct and accessory compartment lights.

ITEM	DESIGNATION
A.	Access Platforms, 2.7 m (9 ft.) and 1.9 m (6.4 ft.)
B.	Circuit Breaker Safety Clips and Tags
C.	Seal
D. Material No. 08-004	Bonding and Adhesive Compounds (Ref. 20-31-00)
E. Material No. 11-003	Cleaning Agents (Ref. 20-31-00)

Referenced Procedures

- 24-41-00, P. Block 301	AC External Power Control
- 52-30-00, P. Block 1	Cargo Compartment Doors
- 52-30-00, P. Block 301	FWD and AFT Cargo Compartment Doors
- 52-34-00, P. Block 1	BULK Cargo Compartment Door

2. Procedure

A. Job Set-Up

(1)Position access platform.

(2)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).

(3)Make certain that electronics racks ventilation is correct.

(4)Open FWD and/or AFT cargo compartment door(s) (Ref. 52-30-00, P. Block 1) or BULK cargo compartment door (Ref. 52-34-00, P. Block 1) as required.

(5)Install door actuator safety lock(s) to FWD and/or AFT cargo compartment door actuator(s) (Ref. 52-30-00, P. Block 301).

(6)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
921VU	AIR CONDITION	1LK	Z01
923VU	AIR CONDITION	2LK	W01
101VU	ELEC-HYD PUMP	23GX	GEN2/B05
133VU	HYDRAULIC/ACCU PRESS CTL AND CARGO DOOR PUMP	7GX	333/T51

(7)Place switch 5LK or 22LU to OFF position.

(8)For light 3LK position access platform and remove air conditioning compartment access door 136AR.

(9)For lights 4LK and 6LK open aft cabin under floor compartment door 162AZ and plenum chamber door 171AZ.

B. Removal

(1)Maintenance light 3LK
(Ref. Fig. 401)
(a)Slide back cap (6) and disconnect wiring (7) from light (2).
(b)Remove and retain screw (1), nuts (4) and washers (5).
(c)Remove and discard light (2) and seal (8) from mounting bracket (3).
(2)Maintenance lights 4LK and 6LK
(Ref. Fig. 402)
(a)Slide back cap (7) and disconnect wiring (6) from light (2).
(b)Remove and retain screws (3) and washers (4).
(c)Remove and discard light (2) and seal (5) from mounting bracket (1).

C. Preparation for Installation

WARNING : METHYLETHYLKETONE (MATERIAL NO. 11-003) IS DANGEROUS, HIGHLY FLAMMABLE AND A SKIN IRRITANT. WEAR PROTECTIVE GLOVES OR USE A BARRIER CREAM. WASH IMMEDIATELY WITH CLEAN WATER IF SKIN IS SPLASHED WITH SOLVENT. AVOID INHALING FUMES.

(1)Remove old Silicone elastomer cement (Material No. 08-004) from aircraft structure using Methylethylketone (Material No. 11-003).
(2)Apply Silicone elastomer cement (Material No. 08-004) to mounting bracket area in contact with the light assembly.

D. Preparation of Replacement Component
(1)Apply Silicone elastomer cement (Material No. 08-004) to light assembly area in contact with the mounting bracket.

E. Installation
(1)Maintenance light 3LK (Ref. Fig. 401)
(a)Position light (2) and new seal (8) in mounting bracket (3).
(b)Install screws (1), washers (5) and nuts (4).
(c)Connect wiring (7) to light (2).
(d)Install cap (6).
(e)Remove safety clips and tags and close circuit breakers 1LK and 2LK.
(2)Maintenance lights 4LK and 6LK (Ref. Fig. 402)
(a)Position light (2) and new seal (5) in mounting bracket (1).
(b)Install washers (4) with screws (3).
(c)Connect wiring (6) to light (2).
(d)Install cap (7).
(e)Remove safety clips and tags and close circuit breakers 1LK and 2LK.

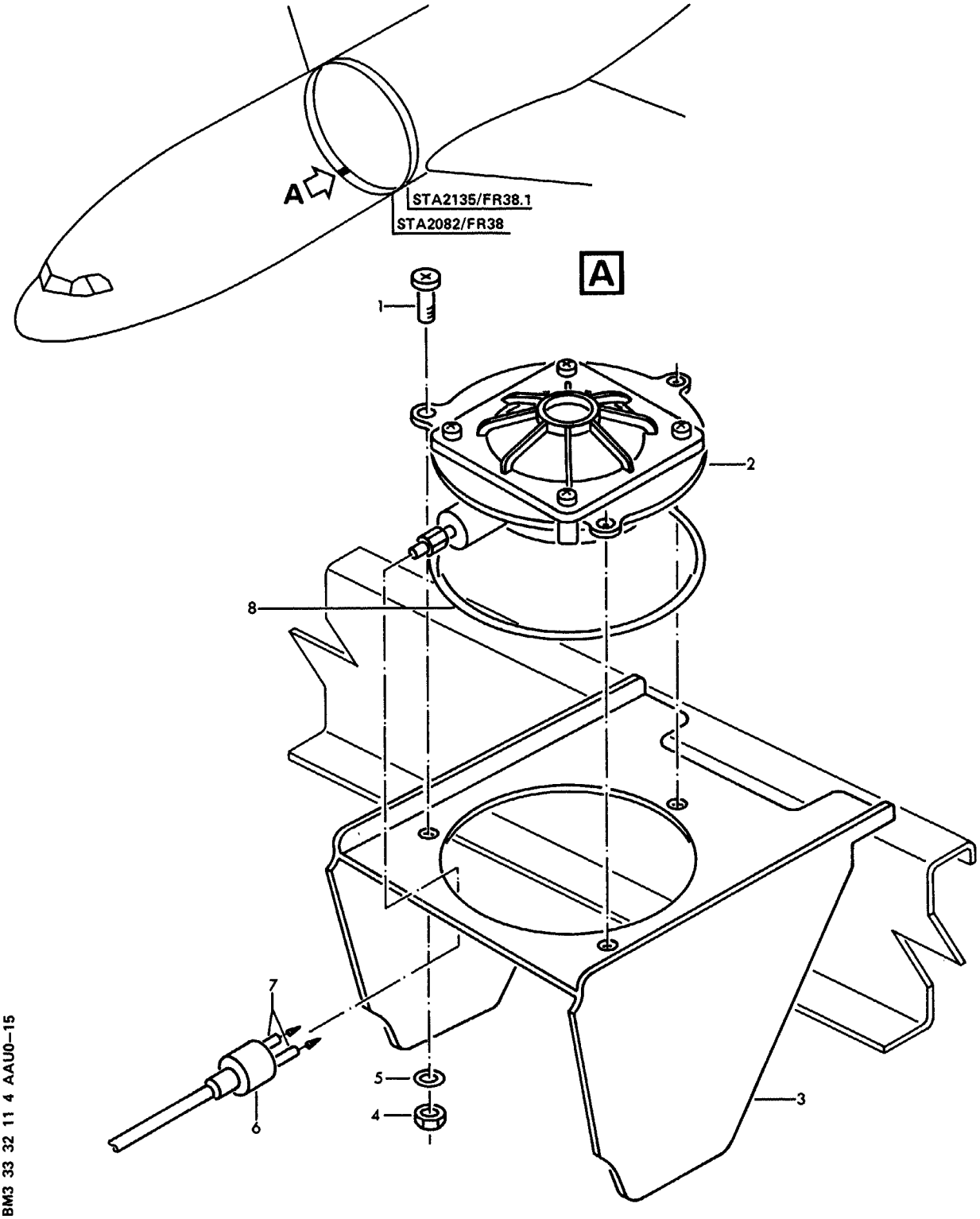
F. Test
Initial conditions:
- Correct electrical power supply (115VAC, 28VDC),
- Safety clips and tags removed and circuit breakers 1LK and 2LK closed.

(1)Test of maintenance light 3LK

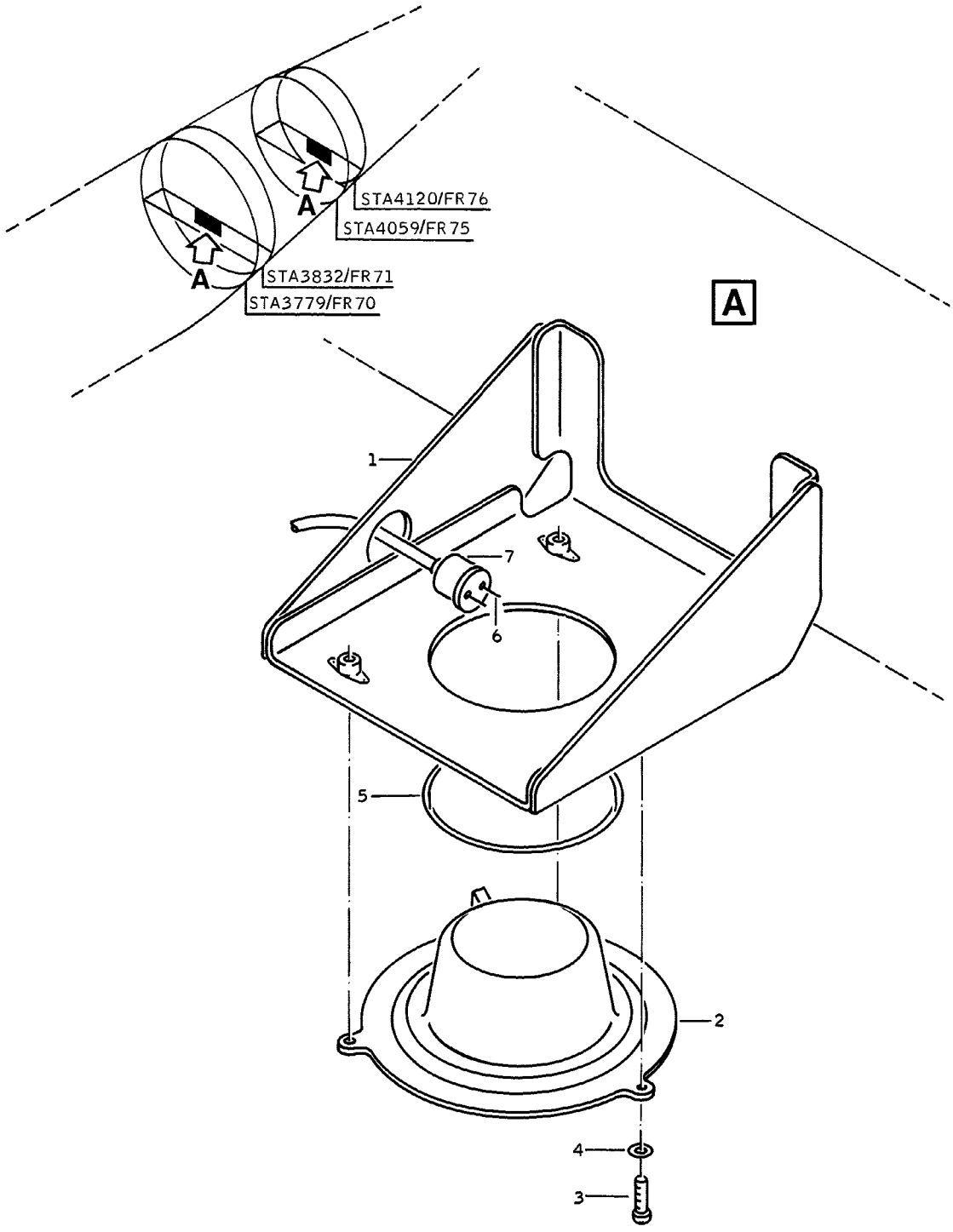
ACTION	RESULT
1. Place toggle switch 5LK in ON position.	Maintenance light 3LK comes on.
2. Place toggle switch 5LK	Maintenance light 3LK goes off.

ACTION	RESULT
in OFF position.	
(2)Test of maintenance lights 4LK and 6LK	
ACTION	**RESULT**
1. Place toggle switch 22LU (862VU) in ON position.	Maintenance lights 4LK and 6LK come on.
2. Place toggle switch 22LU (862VU) in OFF position.	Maintenance lights 4LK and 6LK go off.

F. Close-Up
(1)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(2)Install air conditioning compartment access door 136AR and remove access platform.
(3)Close plenum chamber door 171AZ and AFT cabin under floor compartment door 162AZ.
(4)Remove safety clips and tags and close circuit breakers 7GX and 23GX.
(5)Remove door actuator safety lock(s) (Ref. 52-30-00, P. Block 301).
(6)Close FWD and/or AFT cargo compartment door(s) (Ref. 52-30-00, P. Block 1) or BULK cargo compartment door (Ref. 52-34-00, P. Block 1) as required.
(7)De-energize the aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).
(8)Remove access platform.



Maintenance Light 3LK
Figure 401



Maintenance Lights 4LK, 6LK
Figure 402

FWD-AFT-BULK CARGO COMPARTMENT LIGHTING - DESCRIPTION AND OPERATION

1. General

The FWD, AFT and BULK cargo compartment are illuminated with ceiling lights, eight in FWD, six in the AFT and three in the BULK cargo compartment. There is also a single light in the FWD and AFT cargo loading area.
Illumination of the FWD cargo compartment is provided by lights 6LU, 8LU, 9LU, 10LU, 11LU, 12LU, 13LU and 15LU. The lights are protected by circuit breakers 1LU and 2LU located on panel 921VU and controlled by toggle switch 4LU. The FWD cargo loading area is illuminated by 16LU which is protected by circuit breaker 3LU and controlled by toggle switch 5LU.
Illumination of the AFT cargo compartment is provided by lights 24LU, 26LU, 27LU, 28LU, 29LU and 31LU. The lights are protected by circuit breaker 19LU and controlled by toggle switch 21LU. The AFT cargo loading area is illuminated by light 36LU which is protected by circuit breaker 18LU and controlled by toggle switch 23LU.

R **ON A/C 001-100,

Illumination of the BULK cargo compartment is provided by lights 32LU, 33LU and 34LU which are protected by circuit breaker 20LU and controlled by toggle switch 22LU.

R **ON A/C 101-200,

Illumination of the BULK cargo compartment is provided by lights 32LU and 34LU which are protected by circuit breaker 20LU and controlled by toggle switch 22LU. A single lamp, 33LU, in the BULK cargo compartment also comes on when circuit breaker 19LU and toggle switch 21LU are closed so that container position seven is also illuminated (Ref. 25-56-00,

R **ON A/C ALL

2. Component Location

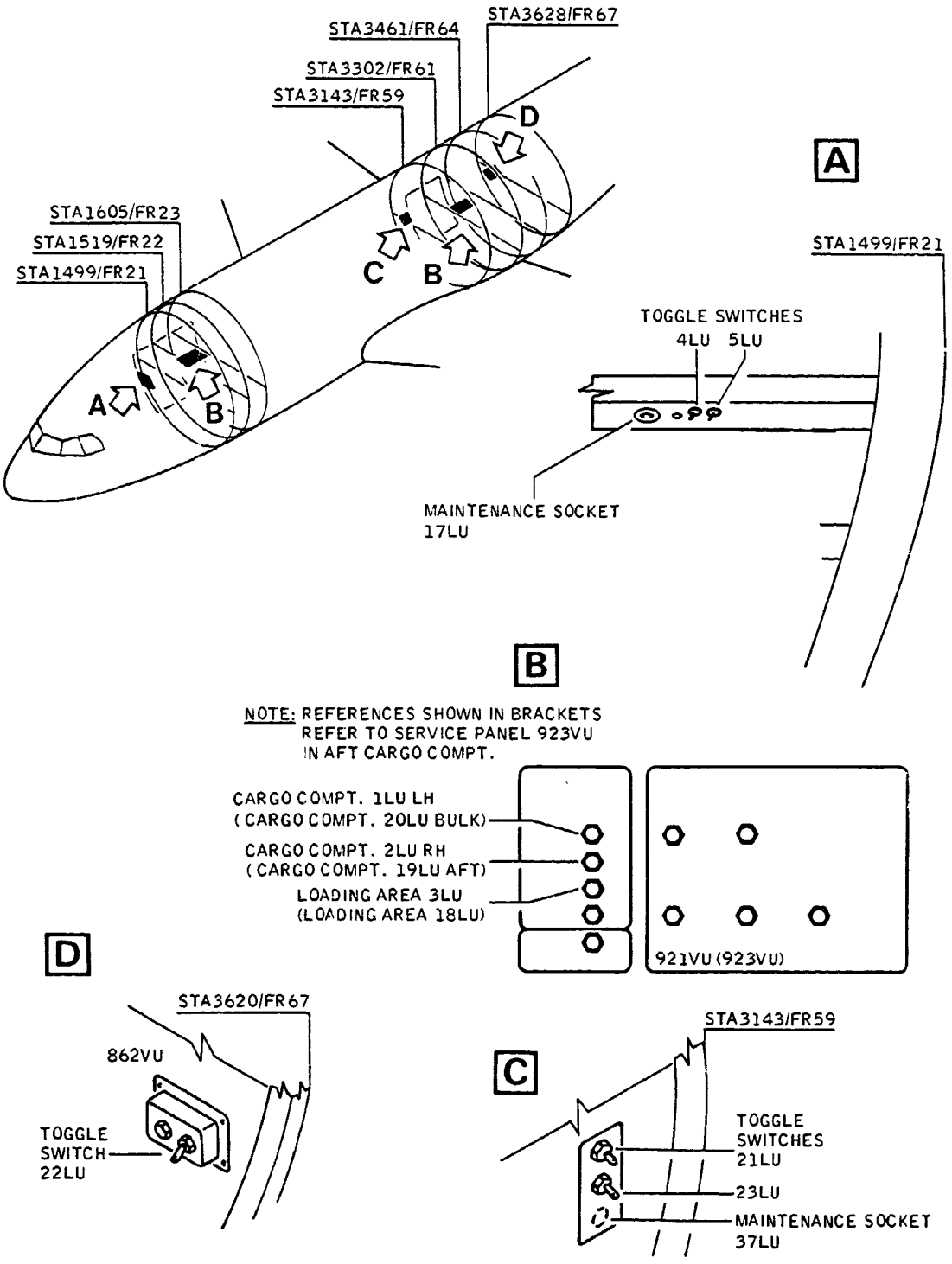
A. FWD Cargo Compartment
(Ref. Fig. 001)

R **ON A/C 001-100,

(Ref. Fig. 002)

R **ON A/C 101-200,

(Ref. Fig. 003)



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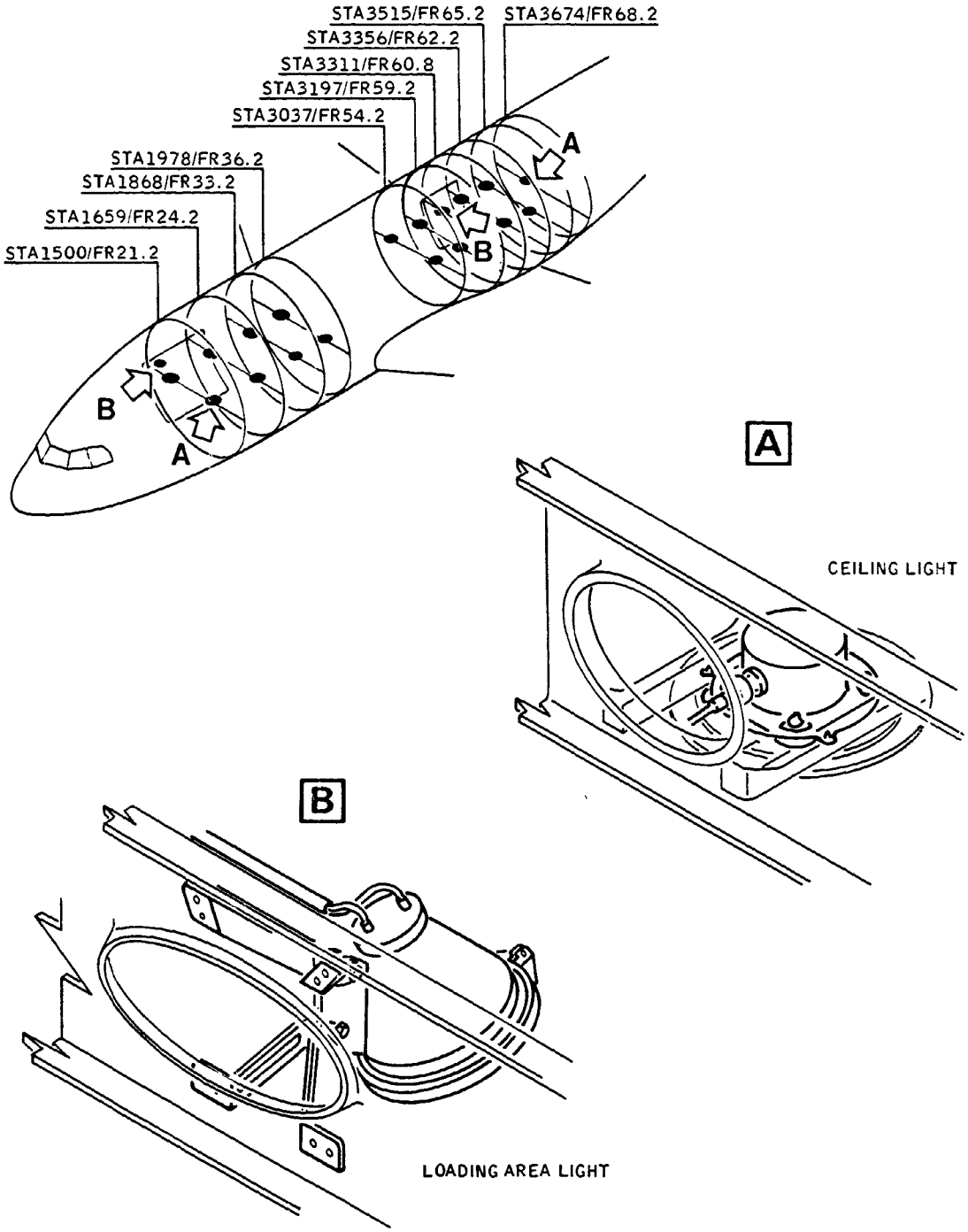
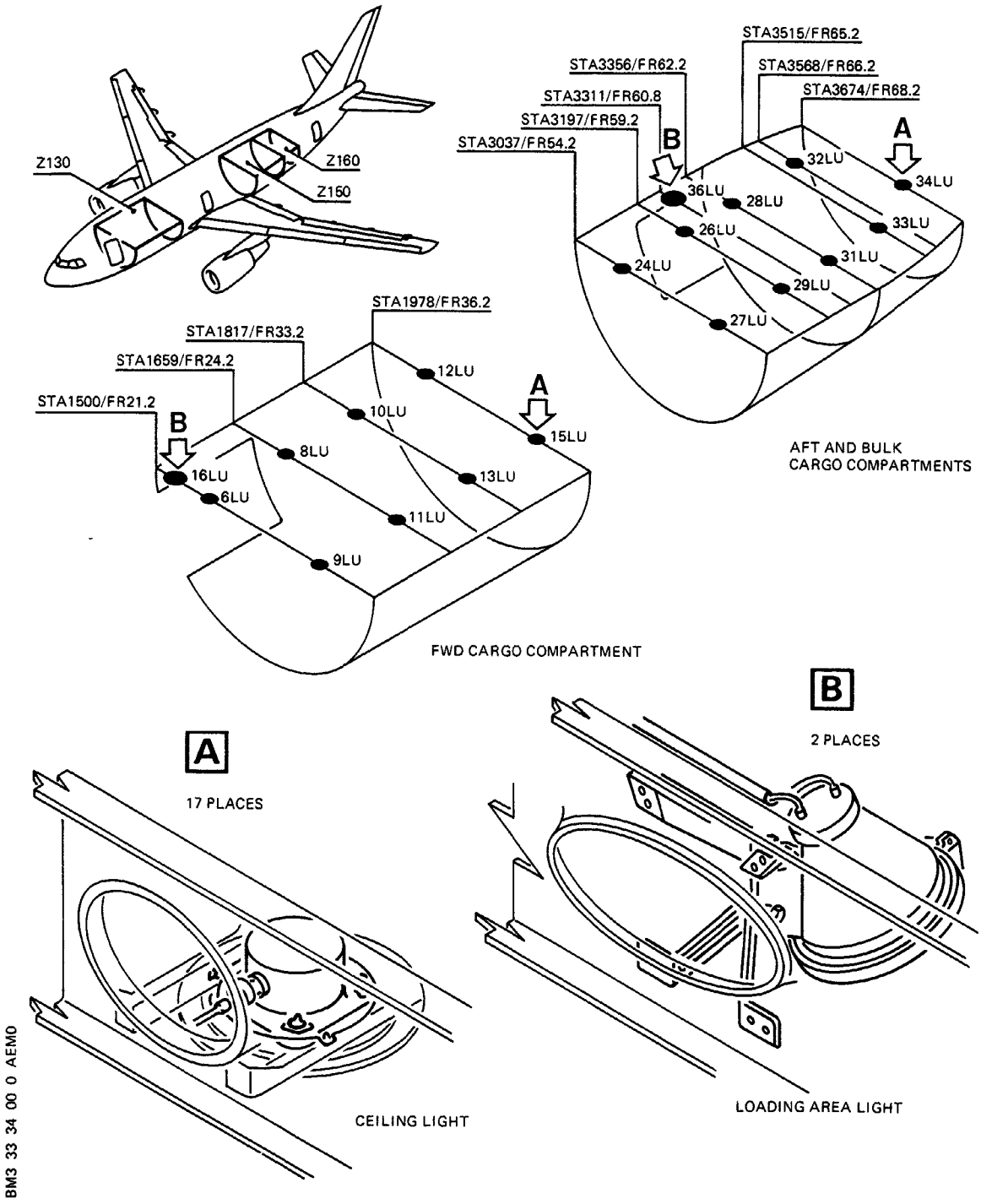
Cargo Compartment Lighting - Component Location
Figure 001



Cargo Compartment Lighting
Figure 002



Cargo Compartment Lighting
Figure 003

R **ON A/C ALL

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF
4LU	TOGGLE SWITCH	906VU	132	811	33-34-00
5LU	TOGGLE SWITCH	906VU	132	811	33-34-00
6LU	CEILING LIGHT		132	811	33-34-00
8LU	CEILING LIGHT		132	811	33-34-00
9LU	CEILING LIGHT		131	811	33-34-00
10LU	CEILING LIGHT		132	811	33-34-00
11LU	CEILING LIGHT		131	811	33-34-00
12LU	CEILING LIGHT		132	811	33-34-00
13LU	CEILING LIGHT		131	811	33-34-00
15LU	CEILING LIGHT		131	811	33-34-00
16LU	LOADING AREA LIGHT		132	811	33-34-00
17LU	MAINTENANCE SOCKET	906VU	132	811	33-34-00

B. AFT Cargo Compartment

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF
21LU	TOGGLE SWITCH		152	812	33-34-00
23LU	TOGGLE SWITCH		152	812	33-34-00
24LU	CEILING LIGHT		152	812	33-34-00
26LU	CEILING LIGHT		152	812	33-34-00
27LU	CEILING LIGHT		151	812	33-34-00
28LU	CEILING LIGHT		152	812	33-34-00
29LU	CEILING LIGHT		151	812	33-34-00
31LU	CEILING LIGHT		151	812	33-34-00
36LU	LOADING AREA LIGHT		152	812	33-34-00
37LU	MAINTENANCE SOCKET		152	812	33-34-00

R **ON A/C 001-100,

C. BULK Cargo Compartment

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF
22LU	TOGGLE SWITCH	862VU	162	813	33-34-00
32LU	CEILING LIGHT		162	813	33-34-00
33LU	CEILING LIGHT		161	813	33-34-00
34LU	CEILING LIGHT		162	813	33-34-00

R **ON A/C 101-200,

C. BULK Cargo Compartment

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF
22LU	TOGGLE SWITCH	862VU	162	813	33-34-00
32LU	CEILING LIGHT		162	813	33-34-00
34LU	CEILING LIGHT		162	813	33-34-00

R **ON A/C ALL

3. System Description
In the FWD and AFT cargo compartment, 28 V DC from GND/FLT bus 603PP is routed via circuit breakers 1LU, 2LU (FWD) and 19LU (AFT) to toggle switches 4LU (FWD) and 21LU (AFT). Selection of a switch to the ON position will cause the ceiling lights in the selected cargo compartment to come on. The cargo loading area lights 16LU (FWD) and 36LU (AFT) are supplied with 28 V DC from GND busses 505PP (FWD) and 503PP (AFT) via circuit breakers 3LU (FWD) and 18LU (AFT) when toggle switches 5LU (FWD) and 23LU (AFT) are closed and illuminate their respective areas. 28 V DC is also provided to maintenance sockets 17LU (FWD) and 37LU (AFT) located adjacent to the toggle switches when the relevant circuit breaker is closed.
In the BULK cargo compartment, 28 V DC from GND/FLT bus 603PP is routed via circuit breaker 20LU to toggle switch 22LU. Selection of the switch to ON will cause the ceiling lights to come on.

4. Component Description

A. Cargo loading area lights (16LU, 36LU)
Light 16LU is mounted in the FWD cargo compartment loading area and light 36LU in the AFT cargo compartment loading area. The housing for each light contains a mirror reflector, a sand blasted lens, a rubber seal and a locking ring which are all replaceable. A 28 V DC lamp, rated at 50W, provides an adjustable diffused light in the area.

B. FWD and AFT Cargo Compartment Ceiling Lights
Each light housing contains a rubber seal, a glass lens and a cover plate with protecting grill which enclose the 28 V DC lamp. The lamp is rated at 36W. All component parts are replaceable and easily disassembled by unscrewing four quick-release fasteners.

C. Bulk Cargo Compartment Ceiling Lights
Each light housing contains a rubber seal, a glass lens and a cover plate with protecting grill which encloses the 28 V DC lamp. The lamp is rated at 18W. All component parts are replaceable and easily disassembled by unscrewing four quick-release fasteners.

D. Toggle switches (4LU, 5LU, 21LU, 22LU, 23LU)
Switches 4LU and 5LU are located on service panel 906VU in the FWD cargo compartment, switches 21LU and 23LU in the AFT cargo compartment and switch 22LU on service panel 862VU in the BULK cargo compartment. The switches are the two position single pole type which are selected OFF in the down position and ON in the up position.

E. Maintenance sockets (17LU, 37LU)
A two contact maintenance socket is located in the FWD and AFT cargo compartments, 17LU (FWD) adjacent to toggle switch 5LU and 37LU (AFT) adjacent to toggle switch 23LU. The sockets provide 28 V DC at 50W output.

5. Operation

The ceiling lights in the FWD, AFT and BULK cargo compartment are supplied with 28 V DC from GND/FLT bus 603PP and the FWD and AFT cargo loading area lights with 28 V DC from busses 505PP and 503PP respectively. To operate the systems, the aircraft must be on the ground (or jacked up), the aircraft electrical network energized and MAINT BUS switch located on the forward cabin attendant panel selected ON.

A. FWD Cargo Compartment

(Ref. Fig. 004)

(1) FWD cargo compartment ceiling lights 6LU, 8LU to 13LU and 15LU are controlled by circuit breaker 1LU and 2LU and toggle switch 4LU.
(2) FWD cargo compartment loading area light 16LU is controlled by circuit breaker 3LU and toggle switch 5LU.
(3) Maintenance socket 17LU is controlled by circuit breaker 3LU.

B. AFT and BULK Cargo Compartment

R **ON A/C 001-100,

(Ref. Fig. 005)

R **ON A/C 101-200,

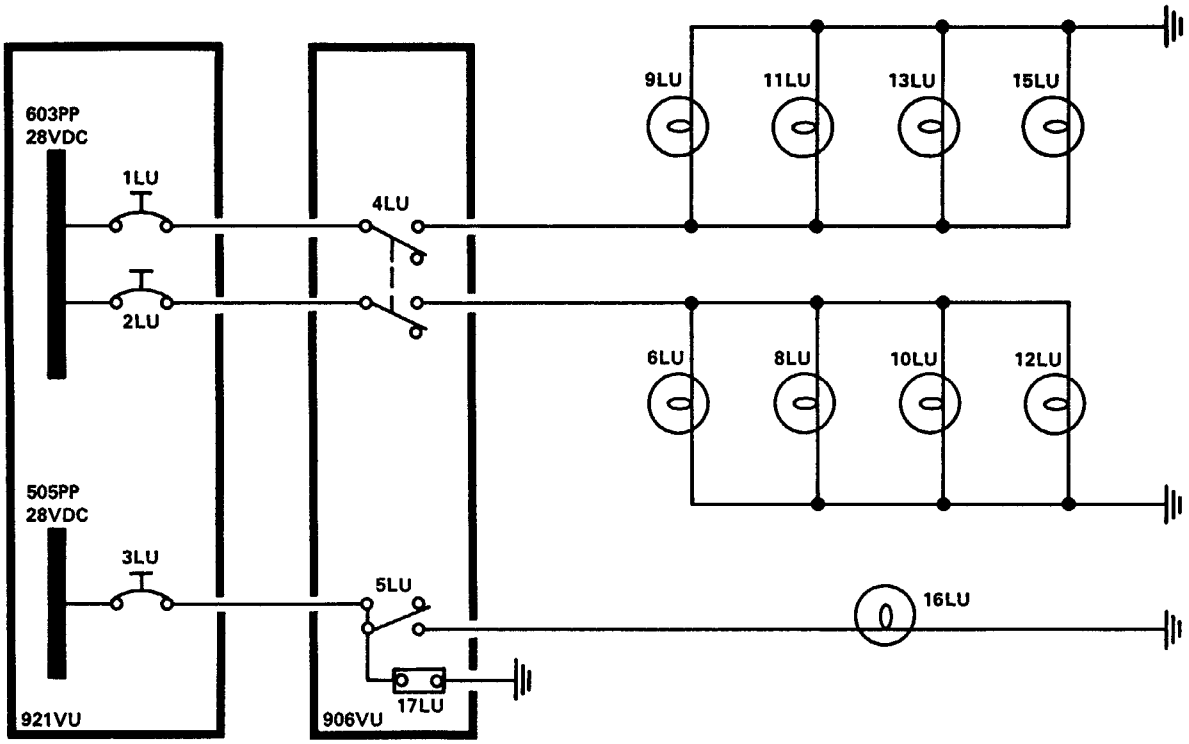
(Ref. Fig. 006)

R **ON A/C 001-100,

(1) AFT cargo compartment ceiling lights 24LU, 26LU to 29LU and 31LU are controlled by circuit breaker 19LU and toggle switch 21LU.
(2) AFT cargo compartment loading area light 36LU is controlled by circuit breaker 18LU and toggle switch 23LU.
(3) Maintenance socket 37LU is controlled by circuit breaker 18LU.
(4) BULK cargo compartment ceiling lights 32LU, 33LU and 34LU are controlled by circuit breaker 20LU and toggle switch 22LU.

R **ON A/C 101-200,

(1) AFT cargo compartment ceiling lights 24LU, 26LU to 29LU, 31LU and BULK cargo compartment ceiling light 33LU are controlled by circuit breaker 19LU and toggle switch 21LU.
(2) AFT cargo compartment loading area light 36LU is controlled by circuit breaker 18LU and toggle switch 23LU.
(3) Maintenance socket 37LU is controlled by circuit breaker 18LU.
(4) BULK cargo compartment ceiling lights 32LU and 34LU controlled by circuit breaker 20LU and toggle switch 22LU.



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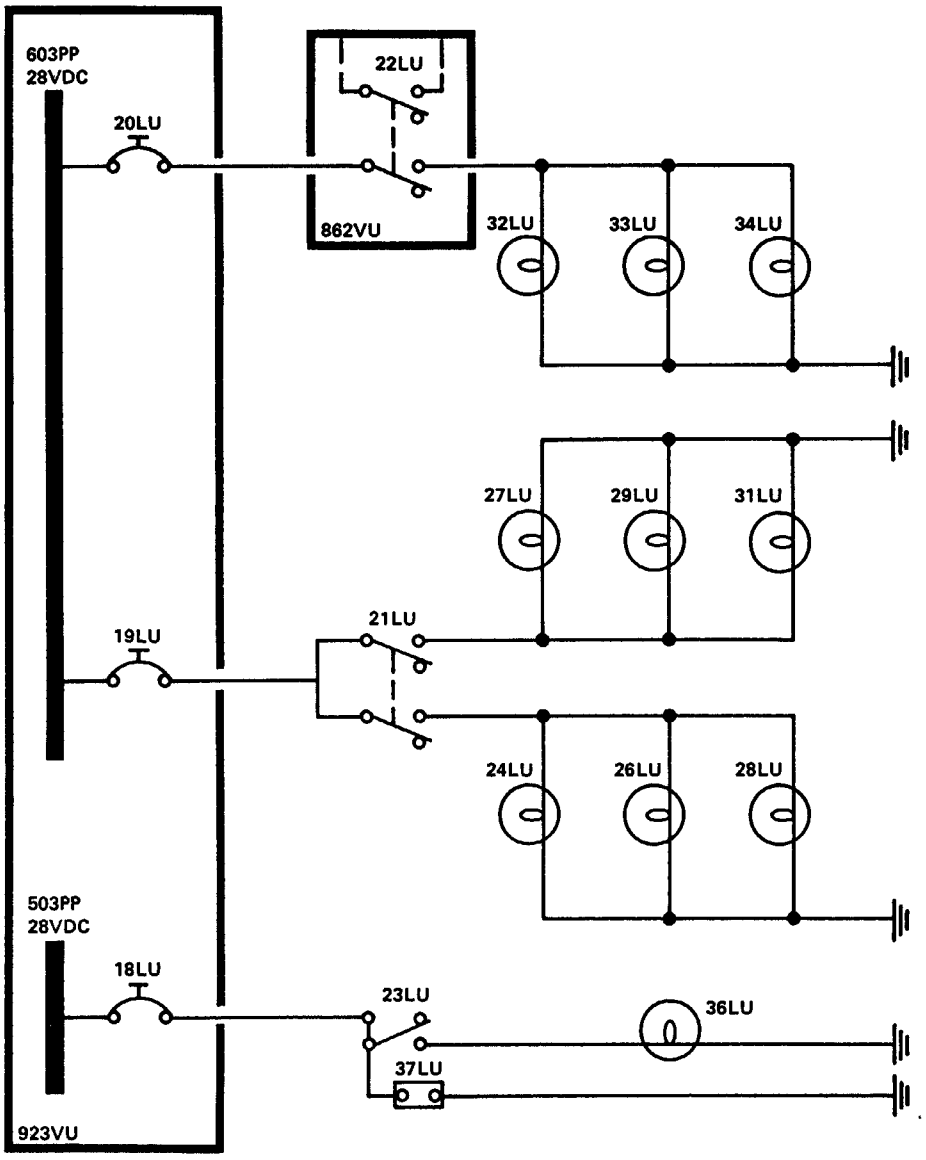
FWD Cargo Compartment Lighting - Schematic
Figure 004



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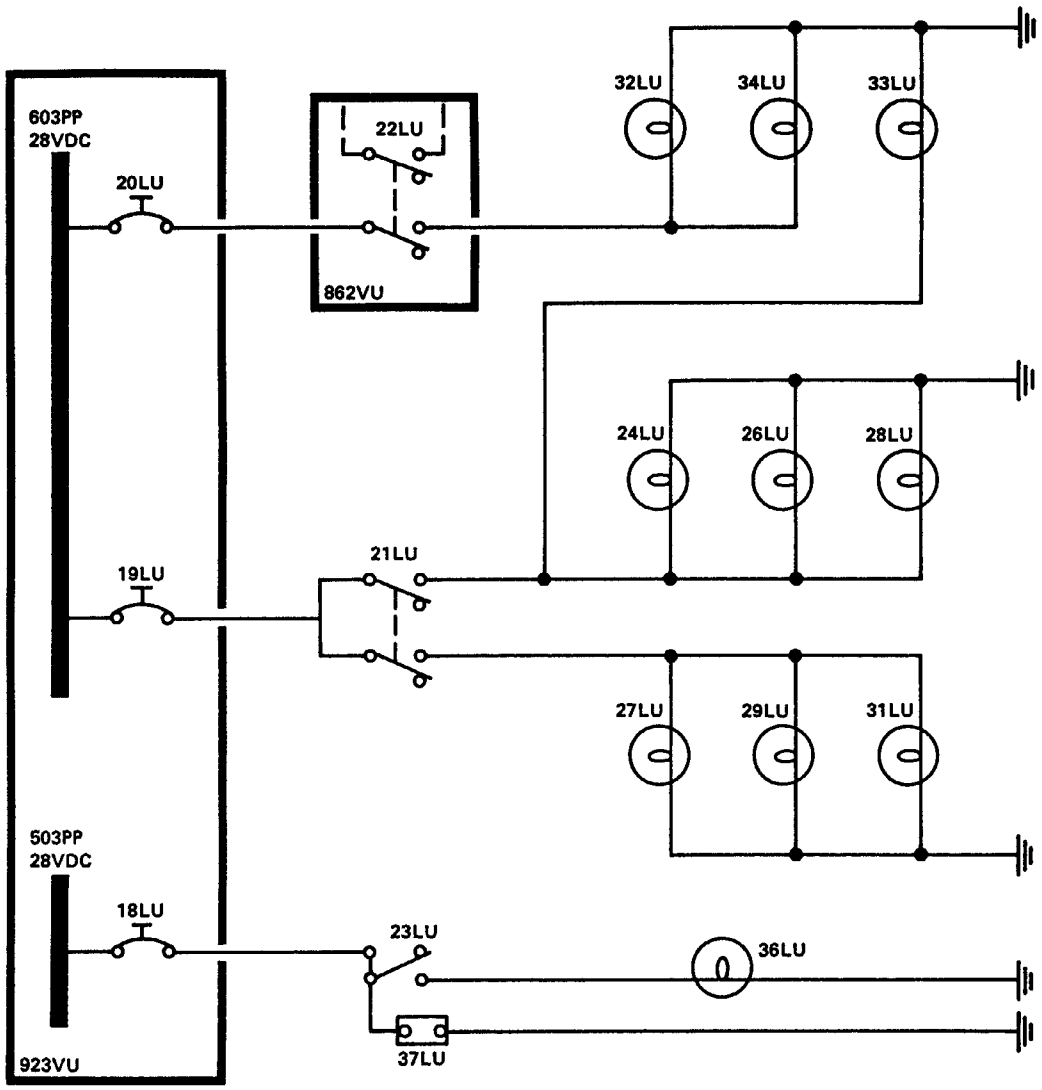
AFT and BULK Cargo Compartment Lighting-Schematic
Figure 005



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AFT and BULK Cargo Compartment Lighting-Schematic
Figure 006

1. Operational Test

A. Reason for the Job
(1)Test of ceiling lights in FWD or AFT and BULK cargo compartment.
(2)Test of cargo loading area lights in FWD or AFT cargo compartment.

B. Equipment and Materials

ITEM	DESIGNATION
(1)	Access Platform, 2.7 m (9 ft.)
(2)	Circuit Breaker Safety Clips and Tags

Referenced Procedures

- 24-41-00, P. Block 301	AC External Power Control
- 52-30-00, P. Block 1	Cargo Compartment Doors
- 52-30-00, P. Block 301	FWD and AFT Cargo Compartment Doors
- 52-34-00, P. Block 1	BULK Cargo Compartment Door

C. Procedure
(1)Job Set-Up
(a)Position access platform.
(b)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(c)Make certain that electronics racks ventilation is correct.
(d)Open FWD and/or AFT cargo compartment door(s) (Ref. 52-30-00, P. Block 1) or BULK cargo compartment door (Ref. 52-34-00, P. Block 1) as required.
(e)Install door actuator safety lock(s) to FWD and/or AFT cargo compartment door actuator(s) (Ref. 52-30-00, P. Block 301).
(f)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
101VU	ELEC-HYD PUMP	23GX	GEN2/B08
133VU	HYDRAULIC/ACCU PRESS CTL AND CARGO DOOR PUMP	7GX	333/T51

(g)Make certain that the following circuit breakers are closed:

PANEL	SERVICE	IDENT.	LOCATION
921VU	LIGHT CARGO COMPT. FWD (LH)	1LU	Z02
921VU	LIGHT CARGO COMPT. FWD (RH)	2LU	Z03
921VU	LIGHT CARGO COMPT. FWD LOADING AREA	3LU	Z04
923VU	LIGHT CARGO COMPT. AFT	19LU	W03
923VU	LIGHT CARGO COMPT. BULK	20LU	W04
923VU	LIGHT CARGO COMPT. AFT LOADING AREA	18LU	W02

(2)Test

(a)Test of ceiling lights in FWD cargo compartment

ACTION	RESULT
1. On panel 906VU, place toggle switch 4LU in ON position.	In FWD cargo compartment: - all ceiling lights come on.
2. On panel 906VU, place toggle switch 4LU in OFF position.	In FWD cargo compartment: - all ceiling lights go off.

(b)Test of ceiling lights in AFT cargo compartment

ACTION	RESULT
1. On wall panel, place toggle switch 21LU in ON position.	In AFT cargo compartment: - all ceiling lights come on.
2. On wall panel, place toggle switch 21LU in OFF position.	In AFT cargo compartment: - all ceiling lights go off.

R **ON A/C 001-100,

(c)Test of ceiling lights in BULK cargo compartment

ACTION	RESULT
1. On panel 862VU, place toggle switch 22LU in ON position.	In BULK cargo compartment: - all ceiling lights come on
2. On panel 862VU, place toggle switch 22LU in OFF position.	In BULK cargo compartment: - all ceiling lights go off.

R **ON A/C 101-200,

(c)Test of ceiling lights in BULK cargo compartment

ACTION	RESULT
1. On panel 862VU, place toggle switch 22LU in ON position.	In BULK cargo compartment: - lights 32LU and 34LU come on
2. Place toggle switch 21LU in ON position.	In BULK cargo compartment: - light 33LU comes on.
3. On panel 862VU, place toggle switch 22LU in OFF position.	In BULK cargo compartment: - lights 32LU and 34LU go off.

ACTION	RESULT
4. Place toggle switch 21LU in OFF position.	In BULK cargo compartment: - light 33LU goes off.

R **ON A/C ALL

(d)Test of cargo loading area light FWD cargo compartment

ACTION	RESULT
1. On panel 906VU, place toggle switch 5LU in ON position.	In FWD cargo compartment: - light 16LU comes on.
2. On panel 906VU, place toggle switch 5LU in OFF position.	In FWD cargo compartment: - light 16LU goes off.

(e)Test of cargo loading area light AFT cargo compartment.

ACTION	RESULT
1. On wall panel, place toggle switch 23LU in ON position.	In AFT cargo compartment: - light 36LU comes on.
2. On wall panel, place toggle switch 23LU in OFF position.	In AFT cargo compartment: - light 36LU goes off.

D. Close-Up

(1)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(2)Remove safety clips and tags and close circuit breakers 7GX and 23GX.
(3)Remove door actuator safety lock(s) (Ref. 52-30-00, P. Block 301).
(4)Close FWD and/or AFT cargo compartment door(s) (Ref. 52-30-00, P. Block 1) or BULK cargo compartment door (Ref. 52-34-00, P. Block 1) as required.
(5)De-energize the aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).
(6)Remove access platform.

FWD-AFT-BULK CARGO COMPARTMENT LIGHTING - SERVICING

1. Reason for the Job
   Replacement of a defective lamp, lens or seal.

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 2.7 m (9 ft.)
B.	Circuit Breaker Safety Clips and Tags
C.	Lamp 28 V DC
D. Material No. 11-006	Cleaning Agents (Ref. 20-31-00)

Referenced Procedures

- 24-41-00, P. Block 301	AC External Power Control
- 33-34-00, P. Block 501	FWD-AFT-BULK Cargo Compartment Lighting
- 25-54-10, P. Block 201	FWD Cargo Compartment Linings
- 25-55-10, P. Block 201	AFT Cargo Compartment Linings
- 52-30-00, P. Block 1	Cargo Compartment Doors
- 52-30-00, P. Block 301	FWD and AFT Cargo Compartment Doors
- 52-34-00, P. Block 1	BULK Cargo Compartment Door

3. Procedure

A. Job Set-Up
(1)Position access platform.
(2)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(3)Make certain that electronics racks ventilation is correct.
(4)Open FWD and/or AFT cargo compartment door(s) (Ref. 52-30-00, P. Block 1) or BULK cargo compartment door (Ref. 52-34-00, P. Block 1) as required.
(5)Install door actuator safety lock(s) to FWD and/or AFT cargo compartment door actuator(s) (Ref. 52-30-00, P. Block 301).
(6)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
921VU	LIGHT CARGO COMPT. FWD (LH)	1LU	Z02
921VU	LIGHT CARGO COMPT. FWD (RH)	2LU	Z03
921VU	LIGHT CARGO COMPT. FWD LOADING AREA	3LU	Z04
923VU	LIGHT CARGO COMPT. AFT	19LU	W03
923VU	LIGHT CARGO COMPT. BULK	20LU	W04
923VU	LIGHT CARGO COMPT. AFT LOADING AREA	18LU	W02
101VU	ELEC-HYD PUMP	23GX	GEN2/B08
133VU	HYDRAULIC/ACCU PRESS CTL AND CARGO DOOR PUMP	7GX	333/T51

(7)Place the following toggle switches to OFF positions:
- FWD cargo compartment 4LU and 5LU

- AFT cargo compartment 21LU and 23LU
- BULK cargo compartment 22LU

B. Removal
(1)Cargo Compartment Loading Area Lights
(Ref. Fig. 301)
(a)Remove ceiling panels from installation area of lights 16LU (Ref. 25-54-10, P. Block 201) and 36LU (Ref. 25-55-10, P. Block 201).
(b)Remove and retain clamping ring (16) and lens (14).
(c)Remove and discard seal (15) and lamp (13).
(d)Remove reflector (12) from housing (11).
(2)Cargo Compartment Ceiling Lights

R **ON A/C 001-100,

(Ref. Fig. 302)

R **ON A/C 101-200,

(Ref. Fig. 303)

R **ON A/C ALL

(a)FWD and AFT Cargo Compartment Ceiling Lights
1 Release fasteners, remove and retain cover plate with protecting grill (4) and glass lens (5).
2 Remove and discard seal (3).
3 Remove and discard lamp (2) from housing (1).
(b)BULK Cargo Compartment Ceiling Lights
1 Release fasteners, remove and retain cover plate with protecting grill (4) and glass lens (5).
2 Remove and discard seal (3).
3 Remove and discard lamp (2) from housing (1).

R **ON A/C 001-100,

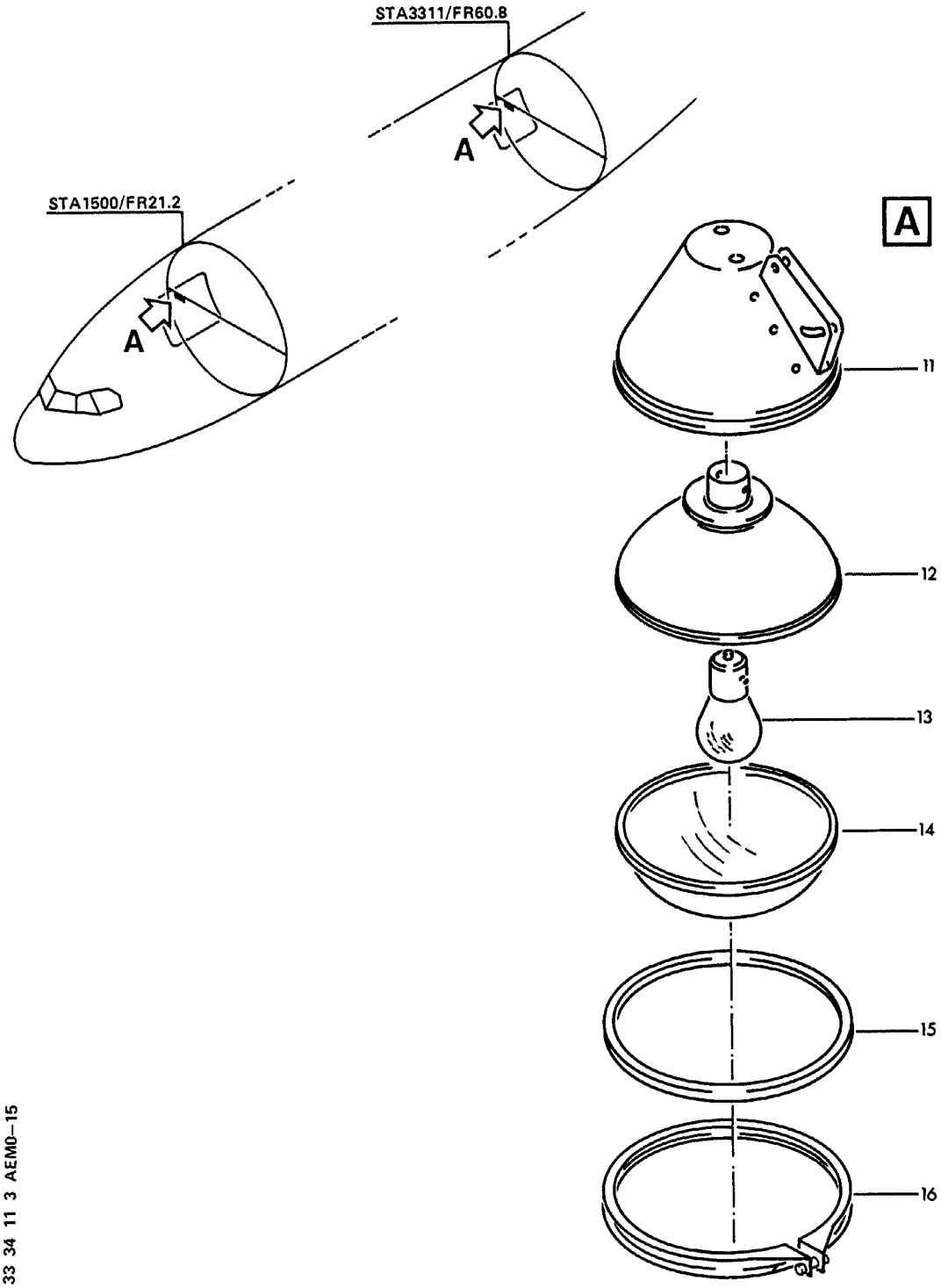
C. Preparation for Installation
(1)Cargo Compartment Ceiling Lights (Ref. Fig. 302)

R **ON A/C 101-200,

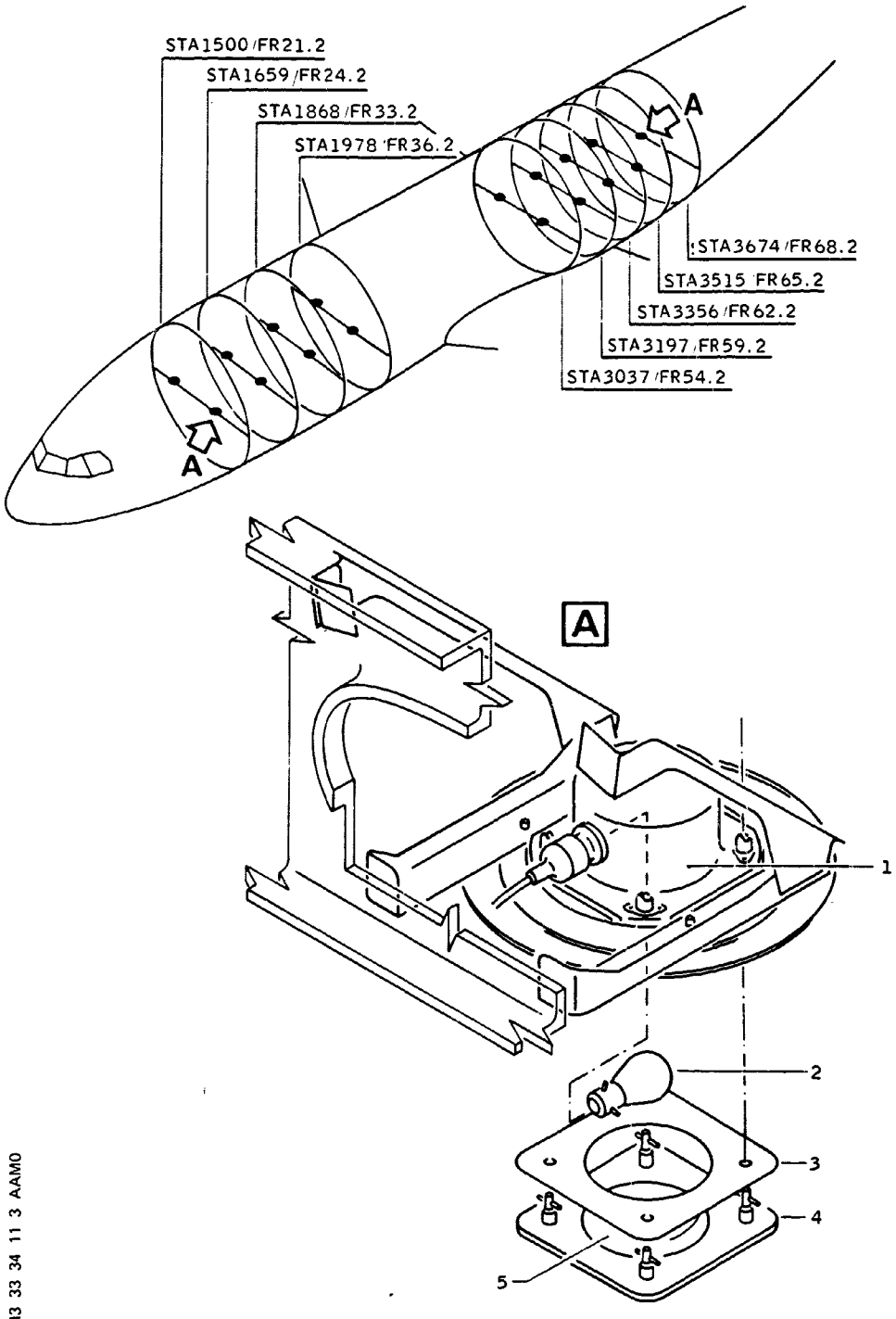
C. Preparation for Installation
(1)Cargo Compartment Ceiling Lights (Ref. Fig. 303)

R **ON A/C ALL

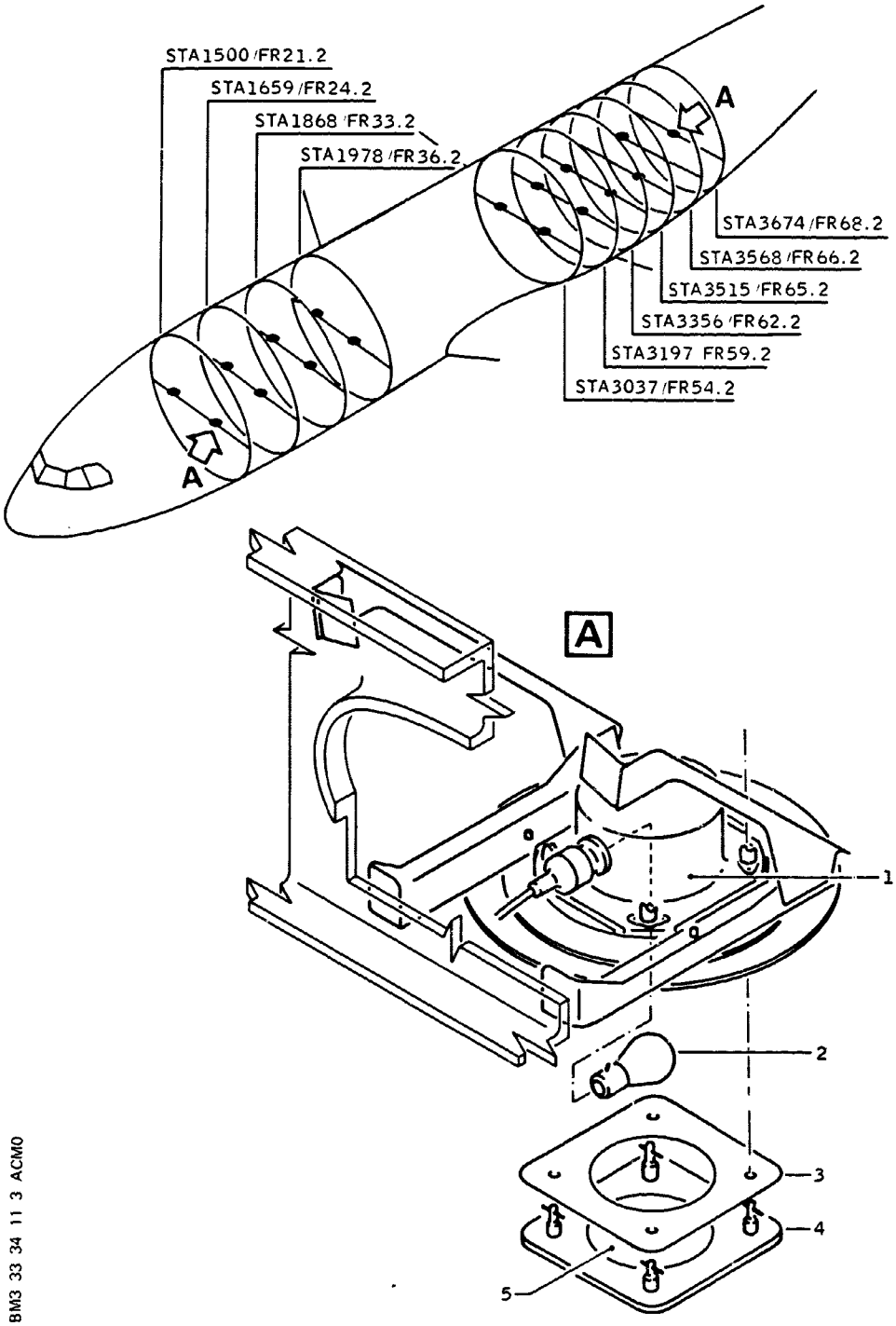
(a)Inspect lens (5) for damage and clean interior of housing (1), lens (5) and cover (4) using Methyl Alcohol (Material No. 11-006).
(2)Cargo Compartment Loading Area Lights (Ref. Fig. 301)



Cargo Compartment Loading Area Lights
Figure 301



Cargo Compartment Ceiling Lighting
Figure 302



Cargo Compartment Ceiling Lighting
Figure 303

(a)Inspect lens (14), reflector (12) and clamping ring (16) for damage and using Methyl Alcohol (Material No. 11-006) clean lens (14) and clamping ring (16).
NOTE : Reflector surfaces must not be cleaned with Methyl Alcohol (Material No. 11-006).

D. Installation
(1)Cargo Compartment Loading Area Lights (Ref. Fig. 301)
(a)Install new lamp (13) in reflector (12).
(b)Install reflector (12) into housing (11).
(c)Install lens (14), and new seal (15) using clamping ring (16).
(d)Install ceiling panels at installation area of lights 16LU (Ref. 25-54-10, P. Block 201) and 36LU (Ref. 25-55-10, P. Block 201).
(e)Remove safety clips and tags and close circuit breakers 1LU, 2LU, 3LU, 18LU, 19LU and 20LU.

R **ON A/C 001-100,

(2)Cargo Compartment Ceiling Lights (Ref. Fig. 302)

R **ON A/C 101-200,

(2)Cargo Compartment Ceiling Lights (Ref. Fig. 303)

R **ON A/C ALL

(a)FWD and AFT Cargo Compartment Ceiling Lights
1 Install new lamp (2) in housing (1).
2 Install new seal (3).
3 Install glass lens (5) and cover plate with protecting grill (4), secure fasteners.
(b)BULK Cargo Compartment Ceiling Lights
1 Install new lamp (2) in housing (1).
NOTE : Use 18 watt lamps only.
2 Install new seal (3).
3 Install glass lens (5) and cover plate with protecting grill (4), secure fasteners.
4 Remove safety clips and tags and close circuit breakers 1LU, 2LU, 3LU, 18LU, 19LU and 20LU.

FWD-AFT-BULK CARGO COMPARTMENT LIGHTING - REMOVAL/INSTALLATION

1. Reason for the Job

A. Removal/Installation of the following:
(1)Cargo Compartment Ceiling Lighting
(2)Cargo Compartment Loading Area Lighting

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 2.7 m (9 ft.)
B.	Circuit Breaker Safety Clips and Tags
C.	Seal
D. Material No. 08-004	Bonding and Adhesive Compounds (Ref. 20-31-00)
E. Material No. 11-003	Cleaning Agents (Ref. 20-31-00)

Referenced Procedures

- 24-41-00, P. Block 301	AC External Power Control
- 25-54-10, P. Block 201	FWD Cargo Compartment Linings
- 25-55-10, P. Block 201	AFT Cargo Compartment Linings
- 33-34-00, P. Block 501	FWD-AFT-BULK Cargo Compartment Lighting
- 52-30-00, P. Block 1	Cargo Compartment Doors
- 52-30-00, P. Block 301	FWD and AFT Cargo Compartment Doors
- 52-34-00, P. Block 1	BULK Cargo Compartment Door

3. Procedure

A. Job Set-Up
(1)Position access platform.
(2)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(3)Make certain that electronics racks ventilation is correct.
(4)Open FWD and/or AFT cargo compartment door(s) (Ref. 52-30-00, P. Block 1) or BULK cargo compartment door (Ref. 52-34-00, P. Block 1) as required.
(5)Install door actuator safety lock(s) to FWD and/or AFT cargo compartment door actuator(s) (Ref. 52-30-00, P. Block 301).
(6)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
921VU	LIGHT CARGO COMPT. FWD (LH)	1LU	Z02
921VU	LIGHT CARGO COMPT. FWD (RH)	2LU	Z03
921VU	LIGHT CARGO COMPT. FWD LOADING AREA	3LU	Z04
923VU	LIGHT CARGO COMPT. AFT	19LU	W03
923VU	LIGHT CARGO COMPT. BULK	20LU	W04
923VU	LIGHT CARGO COMPT. AFT LOADING AREA	18LU	W02
101VU	ELEC-HYD PUMP	23GX	GEN2/B08
133VU	HYDRAULIC/ACCU PRESS CTL AND CARGO DOOR PUMP	7GX	333/T51

(7)Place the following toggle switches to OFF position:
(a)FWD cargo compt. 4LU and 5LU
(b)AFT cargo compt. 21LU, 23LU
(c)BULK cargo compt. 22LU
(8)Remove ceiling panels from installation area of lights (Ref. 25-54-10, P. Block 201) (Ref. 25-55-10, P. Block 201).

B. Removal
(1)Cargo Compartment Ceiling Lighting

R **ON A/C 001-100,

(Ref. Fig. 401)

R **ON A/C 101-200,

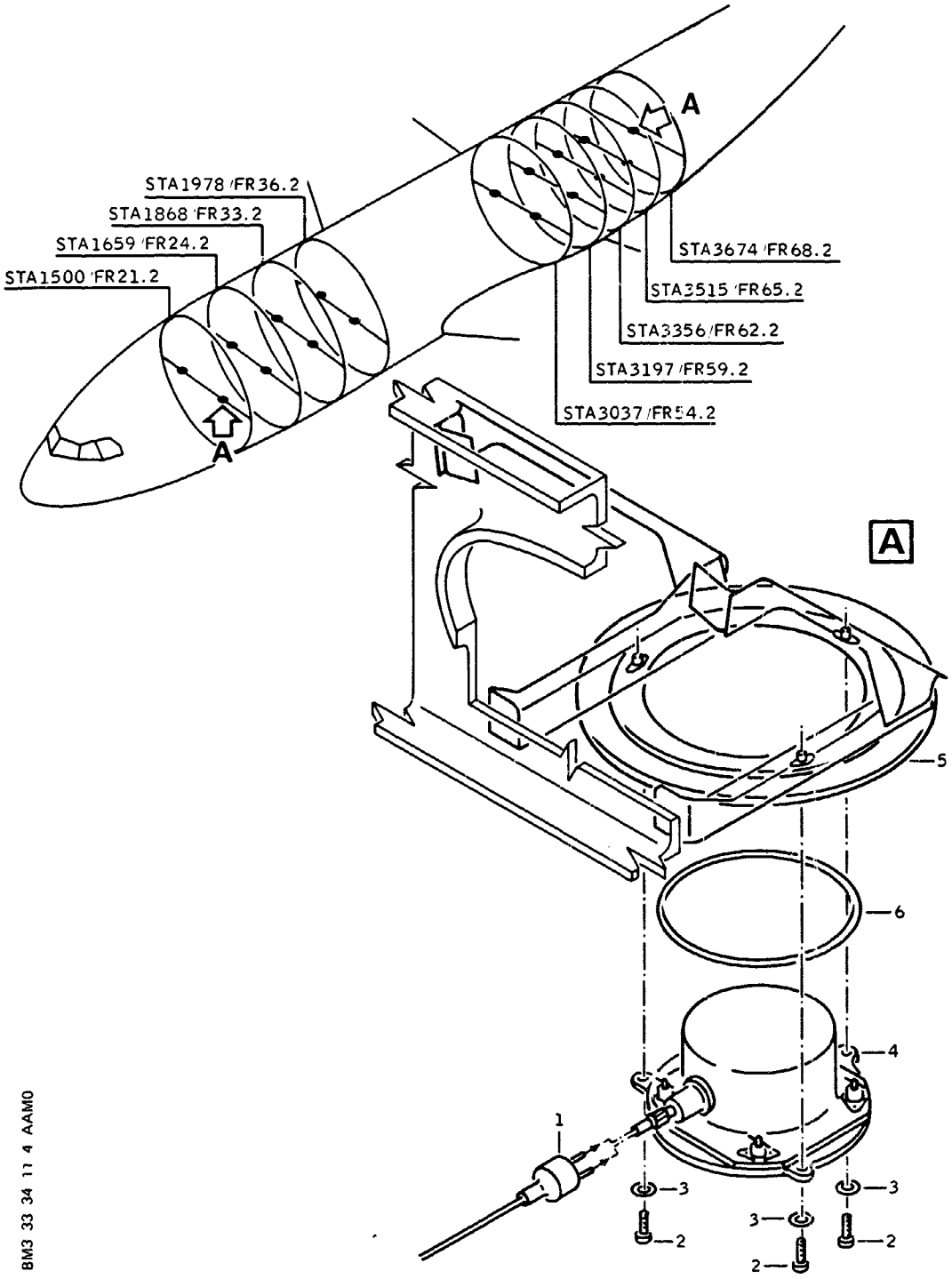
(Ref. Fig. 402)

R **ON A/C ALL

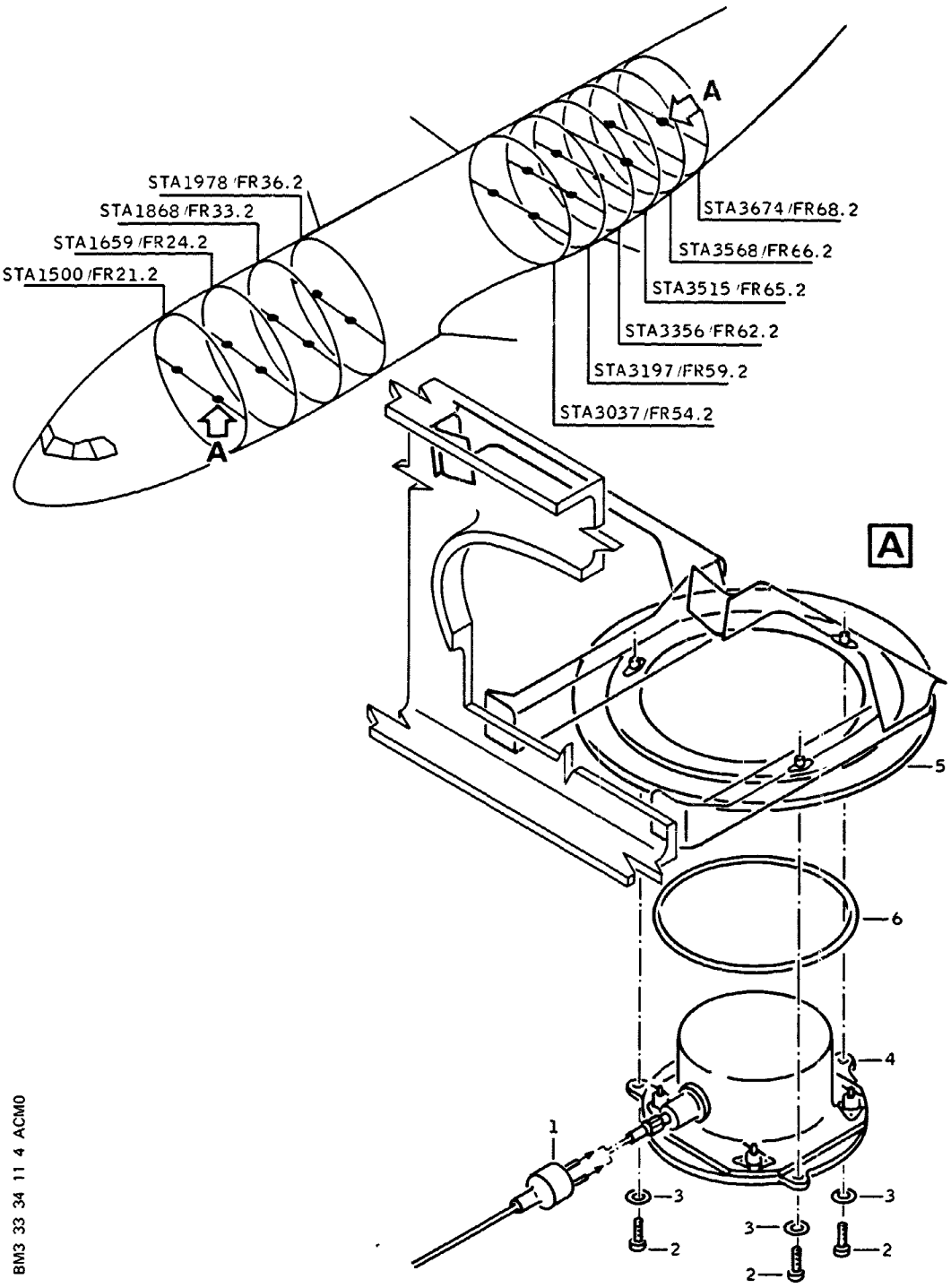
(a)Support light (4), remove and retain screw (2) and washers (3).
(b)Disconnect electrical connector (1).
(c)Remove and discard light (4) and seal (6) from mounting bracket (5).
(2)Cargo Compartment Loading Area Lights
(Ref. Fig. 403)
(Ref. Fig. 404)
(a)Release fasteners (1), remove and retain ceiling panel (2).
(b)Support light (8), remove and retain nuts (4), washers (5), screws (6) and spacers (7).
NOTE : Washers (5) are not fitted to the AFT installation.
(c)Disconnect electrical connectors (3).
(d)Remove and discard light (8).

**ON A/C 001-005,

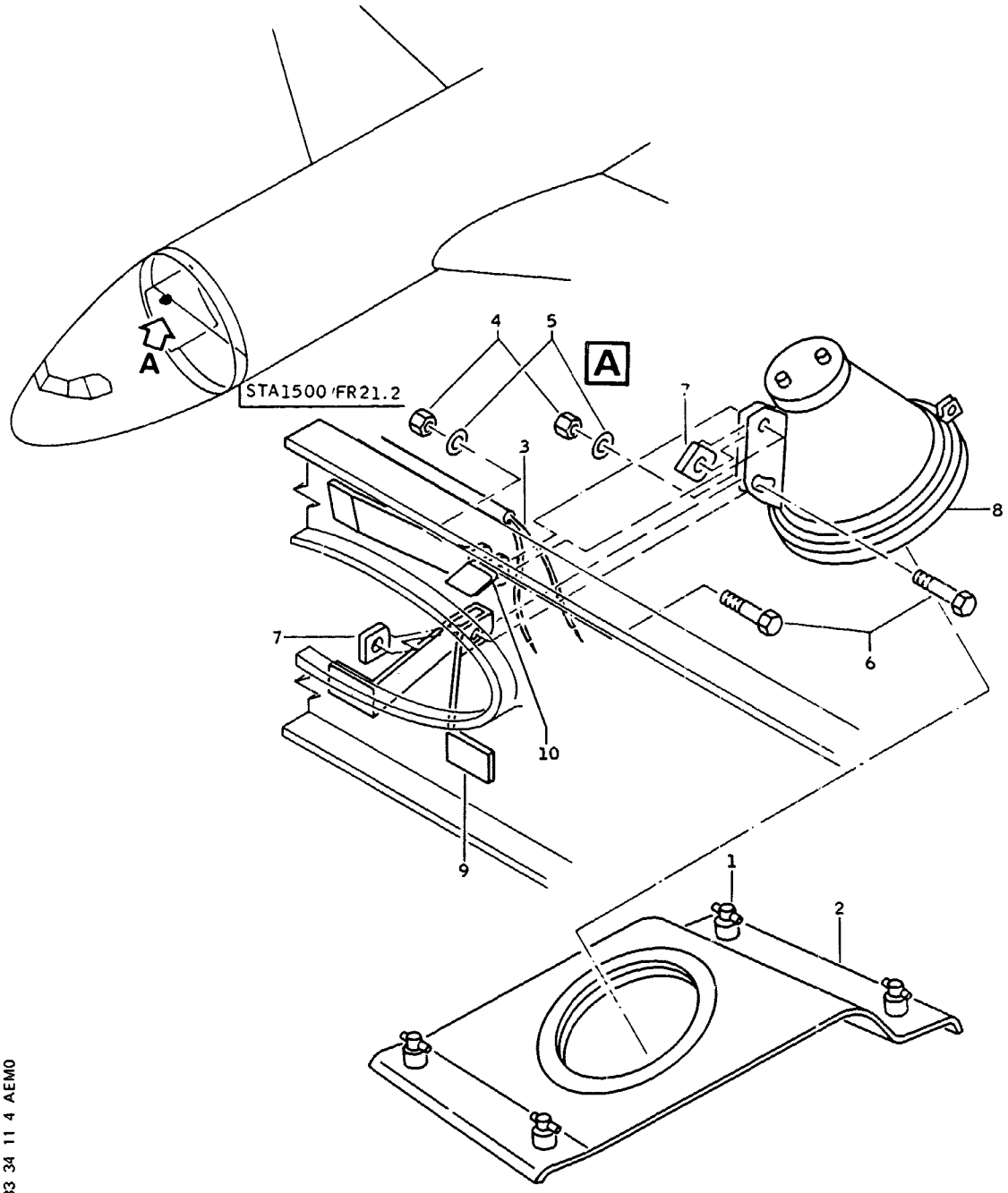
C. Preparation for Installation
WARNING : METHYL-ETHYL-KETONE (MAT. NO. 11-003) IS DANGEROUS. AVOID INHALING FUMES. USE IN WELL VENTILATED AREA ONLY.
METHYL-ETHYL-KETONE (MAT. NO. 11-003) IS HIGHLY FLAMMABLE.
METHYL-ETHYL-KETONE (MAT. NO. 11-003) IS A SKIN IRRITANT. WEAR PROTECTIVE GLOVES OR USE A BARRIER CREAM. WASH IMMEDIATELY WITH CLEAN WATER IF SKIN IS SPLASHED WITH SOLVENT.
(1)Remove old Silicone elastomer cement (Material No. 08-004) from aircraft structure using Methylethylketone (Material No. 11-003).
(2)Make sure that the protective finish from the area around one of the holes for the attachment bolts is removed.
(3)Apply Silicone elastomer cement (Material No. 08-004) to mounting bracket area in contact with the light assembly, except the area where the protective finish has been removed.



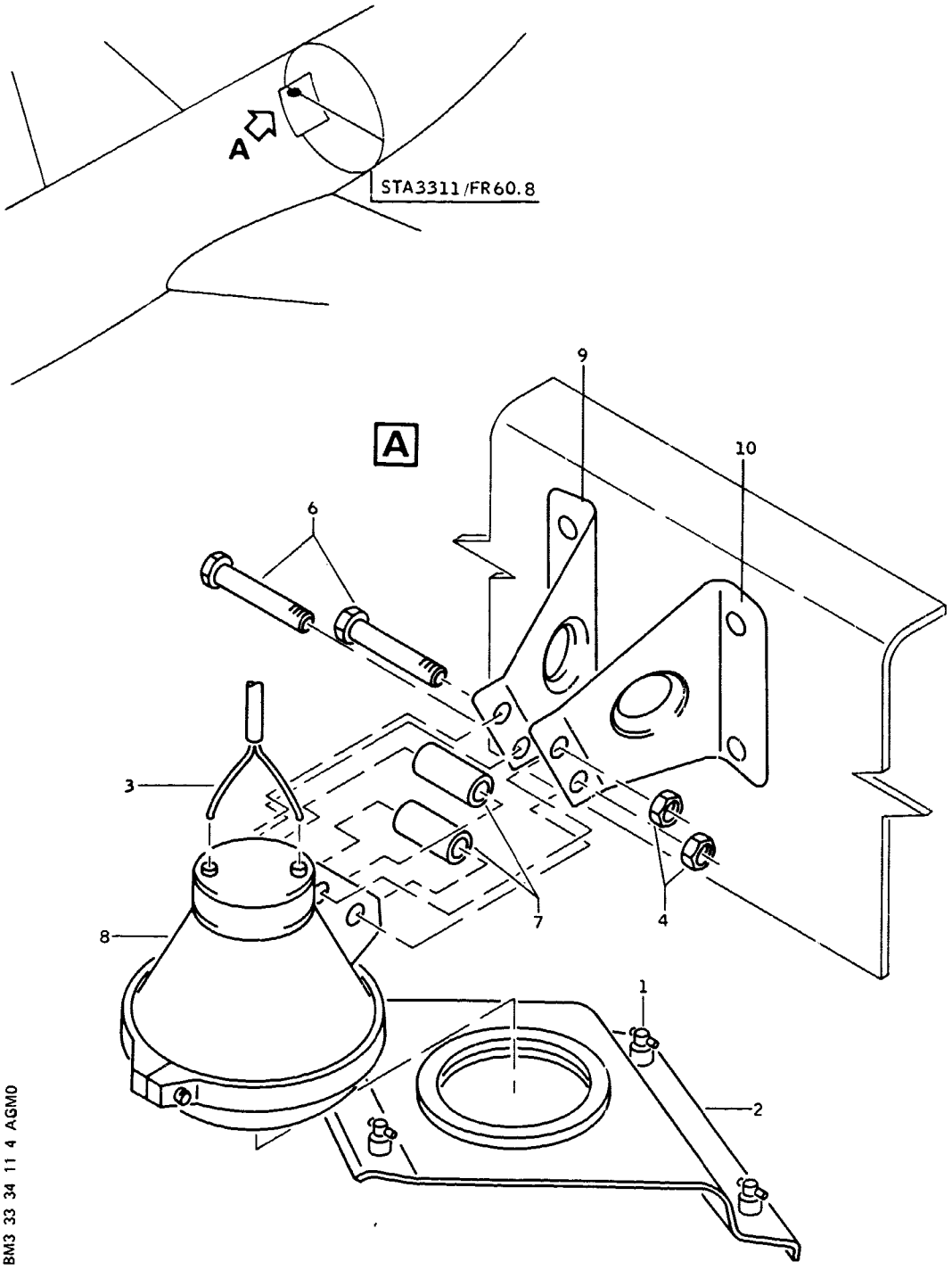
Cargo Compartment Ceiling Lighting
Figure 401



Cargo Compartment Ceiling Lighting
Figure 402



Cargo Compartment Loading Area Lighting FWD
Figure 403



Cargo Compartment Loading Area Lighting AFT
Figure 404

D. Preparation of Replacement Component
(1)Apply Silicone elastomer cement (Material No. 08-004) to light assembly area in contact with the mounting bracket, except the area where the protective finish has been removed.

R **ON A/C 006-200,

C. Preparation for Installation
WARNING : METHYL-ETHYL-KETONE (MAT. NO. 11-003) IS DANGEROUS. AVOID INHALING FUMES. USE IN WELL VENTILATED AREA ONLY.
METHYL-ETHYL-KETONE (MAT. NO. 11-003) IS HIGHLY FLAMMABLE.
METHYL-ETHYL-KETONE (MAT. NO. 11-003) IS A SKIN IRRITANT. WEAR PROTECTIVE GLOVES OR USE A BARRIER CREAM. WASH IMMEDIATELY WITH CLEAN WATER IF SKIN IS SPLASHED WITH SOLVENT.
(1)Remove old Silicone elastomer cement (Material No. 08-004) from aircraft structure using Methylethylketone (Material No. 11-003).
(2)Apply Silicone elastomer cement (Material No. 08-004) to mounting bracket area in contact with the light assembly.

D. Preparation of Replacement Component
(1)Apply Silicone elastomer cement (Material No. 08-004) to light assembly area in contact with the mounting bracket.

R **ON A/C 001-100,

E. Installation
(1)Cargo Compartment Ceiling Lighting (Ref. Fig. 401)

R **ON A/C 101-200,

E. Installation
(1)Cargo Compartment Ceiling Lighting (Ref. Fig. 402)

R **ON A/C ALL

(a)Connect electrical connectors to light (4), position cap (1).
(b)Position light (4) and new seal (6) in mounting bracket (5) and install, using screws (2) with washers (3).

(2)Cargo Compartment Loading Area Lighting (Ref. Fig. 403, 404)
(a)Connect electrical connectors (3) to light (8).
(b)Position light (8) at mounting brackets (9), (10) and install screws (6) and spacers (7).
(c)Install washers (5) and nuts (4). Do not fully tighten at this stage.
NOTE : Washers (5) are not fitted to the AFT installation.
(d)Position ceiling panel (2) to ensure light (8) seats correctly in panel cut-out. Adjust light as required and fully tighten nuts (4).

(e)Install ceiling panel (2) using fasteners (1).
(f)Remove safety clips and tags and close circuit breakers 1LU, 2LU, 3LU, 18LU, 19LU and 20LU.

F. Test
(1)Carry out Operational Test (Ref. 33-34-00, P. Block 501).

G. Close-Up
(1)Install ceiling panels (Ref. 25-54-10, P. Block 201 and 25-55-10, P. Block 201)
(2)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(3)Remove safety clips and tags and close circuit breakers 7GX and 23GX.
(4)Remove door actuator safety lock(s) (Ref. 52-30-00, P. Block 301).
(5)Close FWD and/or AFT cargo compartment door(s) (Ref. 52-30-00, P. Block 1) or BULK cargo compartment door (Ref. 52-34-00, P. Block 1) as required.
(6)De-energize the aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).
(7)Remove access platform.

EQUIPMENT COMPARTMENT LIGHTING - DESCRIPTION AND OPERATION

1. General

Maintenance work in equipment compartments requires :
- 28VDC power supply
- 115 V/400 Hz power supply
- Lighting

For this purpose, equipment compartments are provided with 28VDC and 115 V/400 Hz receptacles and incandescent lights.

2. Component Location

R **ON A/C 001-100,

(Ref. Fig. 001)

R **ON A/C 101-200,

(Ref. Fig. 002)

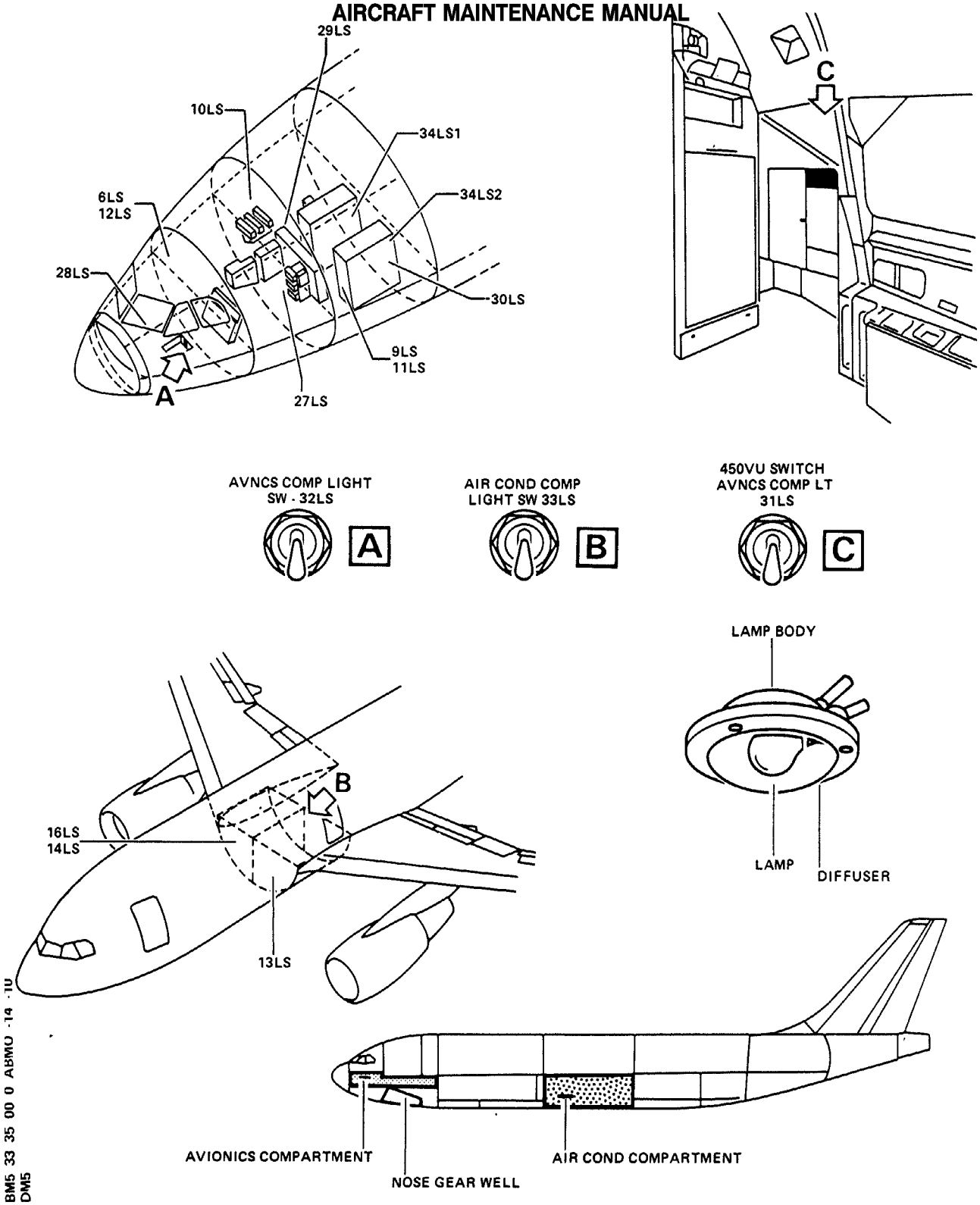
R **ON A/C ALL

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF.
6LS	LIGHT - DOME, AVNCS COMPT R		122	211CZ	33-35-21
9LS	LIGHT - DOME, AVNCS COMPT L		121	211CZ	33-35-21
10LS	LIGHT - DOME, AVNCS COMPT R		122	211CZ	33-35-21
11LS	OUTLET - 28 VDC, AVNCS COMPT		121	211CZ	
12LS	OUTLET - 115 VAC, AVNCS COMPT		122	211CZ	
13LS	LIGHT - DOME, AIR COND COMPT L		143	147BZ	33-35-11
14LS	LIGHT - DOME, AIR COND COMPT R		144	147BZ	33-35-11
16LS	OUTLET - 28 VDC, AIR COND COMPT		144	147BZ	
27LS	LIGHT - DOME, AVNCS COMPT L		121	211CZ	33-35-21
28LS	LIGHT - DOME, AVNCS COMPT R		122	211CZ	33-35-21
29LS	LIGHT - DOME, AVNCS COMPT R		122	211CZ	33-35-21
30LS	LIGHT - DOME, AVNCS COMPT L		121	211CZ	33-35-21
31LS	SWITCH - AVNCS COMPT LIGHT	450VU	211		
32LS	SWITCH - LIGHT, AVIONICS COMPT		122	211CZ	
33LS	SWITCH - COND BAY LT		147	147BZ	
34LS	LIGHT - UTILITY, AVNCS COMPT	90VU	122	211CZ	
34LS1	CONNECTOR - RECEPTACLE	90VU	122	211CZ	
34LS2	CONNECTOR - RECEPTACLE	80VU	121	211CZ	

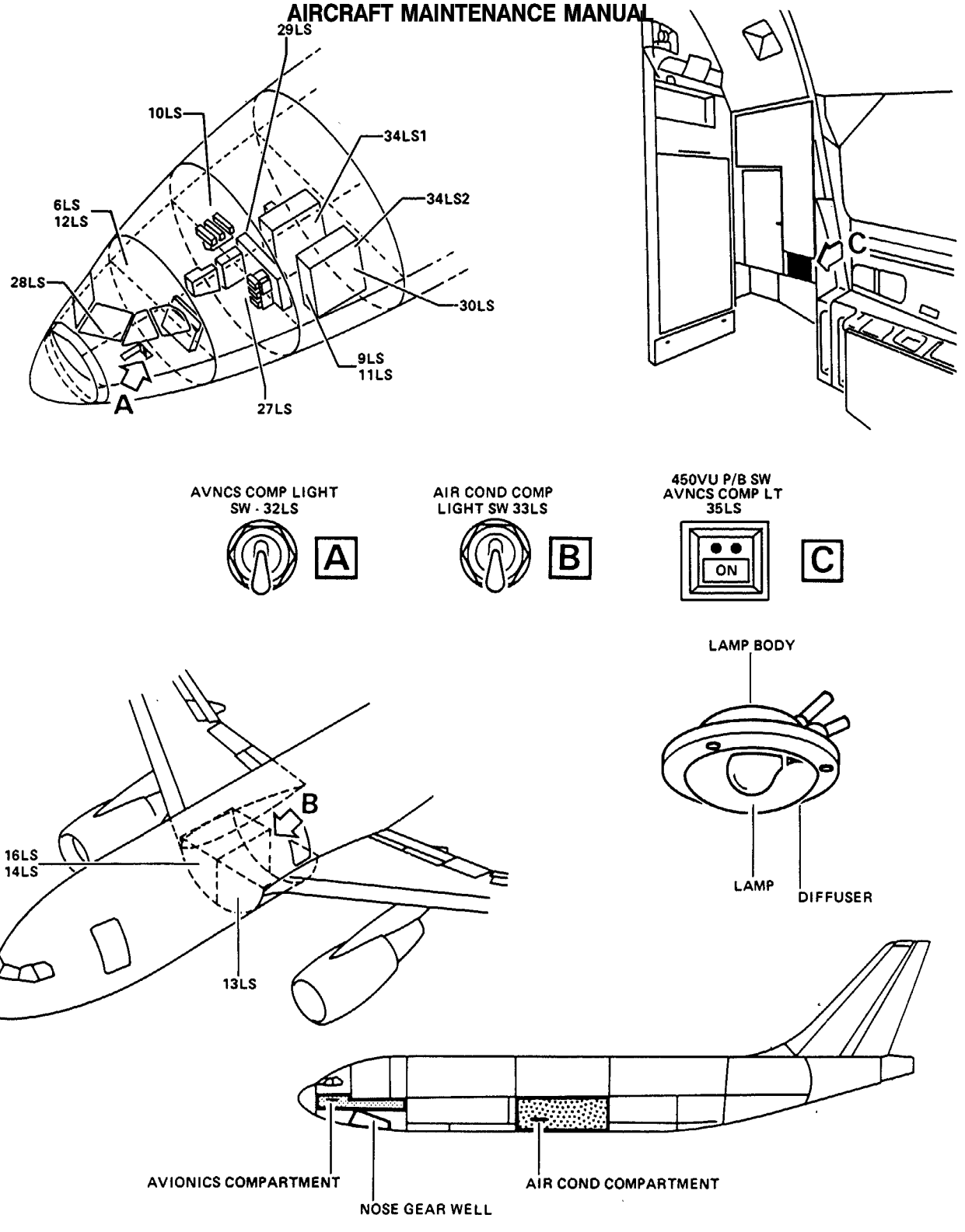
R **ON A/C 101-200,

35LS	P/B SWITCH-AVNCS COMPT LIGHT	450VU	211		

R **ON A/C ALL



Equipment Compartment Lighting - Component Location
Figure 001



Equipment Compartment Lighting - Component Location
Figure 002

3. Air Conditioning Compartment Lighting

(Ref. Fig. 003)

In the air conditioning compartment, lighting is provided by two dome lights 13LS and 14LS, supplied with 28VDC through a switch 33LS located in the hydraulics compartment at FR47 (limit between hydraulics compartment and air conditioning compartment).

The dome lights are of the explosion proof type and sealed.

The diffuser is made of high resistance glass and a protective grille is welded to the dome light body. Each one is fitted with a long-life lamp.

Both dome lights are supplied by ground busbar 503PP through circuit breaker 4LM.

The air conditioning compartment is provided with a 28VDC electrical outlet also supplied by ground busbar 503PP.

This electrical outlet is capable of supplying an apparatus provided with a power lower than or equal to 280W.

Electrical power :

2 dome lights 2 x 18W ---> 36W

One electrical outlet ---> 280W

4. Avionics Compartment Lighting

R **ON A/C 001-100,

(Ref. Fig. 004)

R **ON A/C 101-200,

(Ref. Fig. 005)

R **ON A/C ALL

A. The avionics compartment ambient lighting is provided with seven dome lights distributed in the compartment on either side of the aircraft center line.

R **ON A/C 001-100,

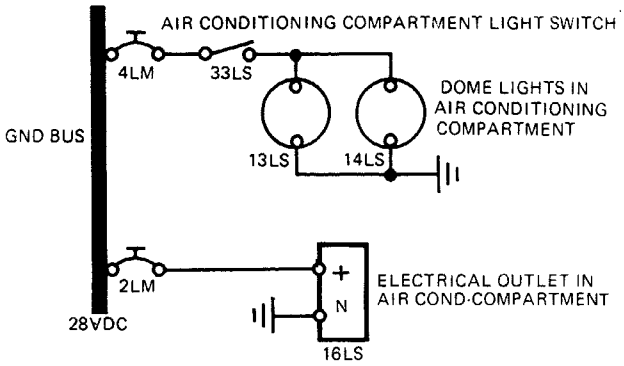
The dome lights are controlled by a two-way system including AVIONICS COMPT switch located in the flight compartment, at the entrance, left hand on panel 450VU, and a switch located at the top of the ladder leading from the floor to the avionics compartment in zone 122.

The dome lights are of the same type as those installed in the flight compartment.

They are fitted with a long-life 18W lamp.

R **ON A/C 101-200,

The dome lights are controlled by a two-way system including AVIONICS COMPT pushbutton switch located in the flight compartment, at the entrance, left hand on panel 450VU, and a switch located at the top of the ladder leading



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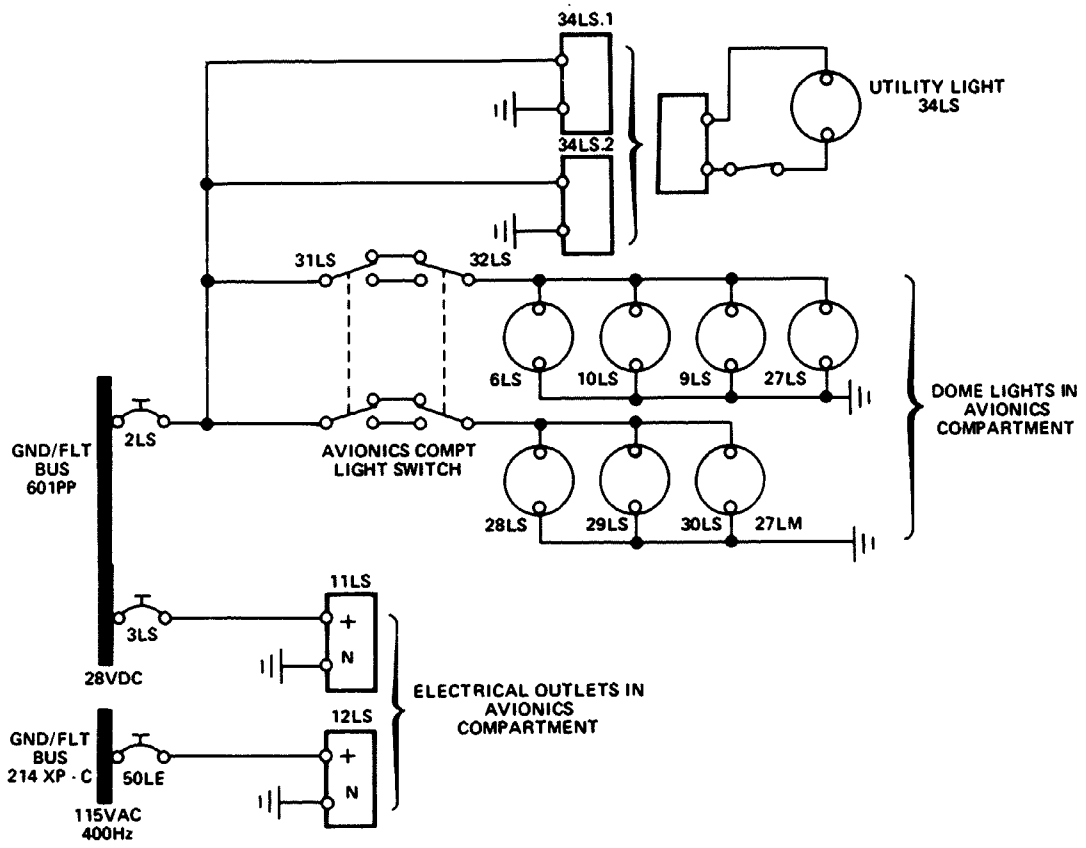
Air Conditioning Compartment Lighting - Schematic Diagram
Figure 003



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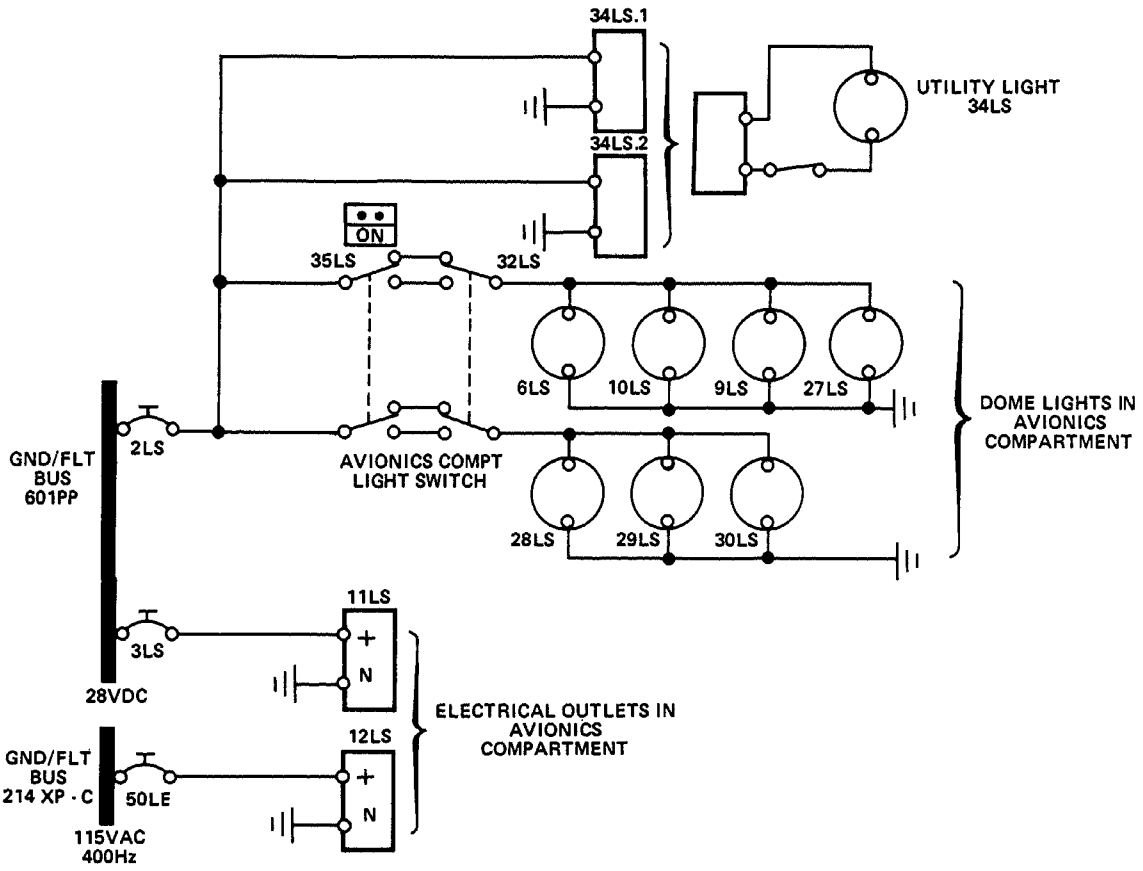
Avionics Compartment Lighting - Schematic Diagram
Figure 004



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Avionics Compartment Lighting - Schematic Diagram
Figure 005

R

from the floor to the avionics compartment in zone 122.
The dome lights are of the same type as those installed in the flight compartment.
They are fitted with a long-life 18W lamp.

R **ON A/C ALL

They are supplied with 28VDC by busbar 601PP through circuit breaker 2LS.

B. A utility light 34LS is provided between electronics rack 80VU and 90VU to enable maintenance work to be carried out between these two racks.
This utility light is composed of :
- a body comprising a socket with a rotary switch
- a cap fitting into the body
- supports which enable the utility light to be oriented
- alligator clips for attachment when utility light is used
- a two-conductor extensible cable fitted with a three-pin connector. When fully extended the cable is 2 meters long approximately.

On each electronics rack 80VU and 90VU a mounting base is provided for the utility light when not used.
This utility light is fitted with a long-life 18W lamp.
It is supplied with 28VDC by busbar 601PP through circuit breaker 2LS located on panel 132VU.

C. Two electrical outlets are provided to supply apparatus, one supplied with 115VAC (12LS) and the other with 28VDC (11LS).
The 115VAC electrical outlet can deliver 1150W and is supplied by the busbar 214XP through circuit breaker 50LE.
The 28VDC electrical outlet can deliver 280W and is supplied by circuit breaker 3LS by ground/flight busbar 601PP.
Avionics compartment load analysis

- Seven 18W dome lights	--->	126W
- One utility light		18W
- AC electrical outlet		1150W
- DC electrical outlet		280W

1. Operational Test

A. Reason for the Job
To check for correct operation of lighting and electrical receptacles in air conditioning and avionics compartments.

B. Equipment and Materials

ITEM	DESIGNATION
(1)	AC/DC Voltmeter (115VAC - 28VDC)
Referenced Procedures	
- 24-41-00, P. Block 301	AC External Power Control
- 32-12-11, P. Block 301	Main Gear Main Door - (Ground Door(s)) Opening)

C. Procedure
(a)Energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(b)Make certain that electronics racks ventilation is correct.
(c)Open main landing gear doors (Ref. 32-12-11, P. Block 301).
(d)Make certain that the following circuit breakers are closed :

PANEL	SERVICE	IDENT.	LOCATION
132VU	LIGHTING/115VAC/OUTLETS/COCKPIT &/ AVNCS/COMPT	50LE	325/K80
132VU	LIGHTING/28VDC OUTLETS/LDG GEAR &/ AIR COND COMPT	2LM	322/N84
132VU	LIGHTING/DOME/LDG GEAR &/AIR COND COMPT	4LM	322/N83
132VU	LIGHTING/28VDC OUTLETS/COCKPIT &/ AVNCS COMPT	3LS	322/N85
132VU	LIGHTING/DOME/AVNCS/COMPT	2LS	322/N82

(2)Test

ACTION	RESULT
1. In air conditioning compartment - zone 147, place air conditioning compartment lighting switch in ON position	- zones 143, 144, both lights come on. - voltage at terminals of receptacle 16LS is 28VDC.
2. In avionics compartment - zone 122, actuate avionics compartment lighting switch	- zones 121, 122, the seven dome lights come on.
3. In flight compartment - panel 450VU, actuate AVNCS COMPT	In avionics compartment - zones 121, 122, the seven dome

ACTION	RESULT
LT switch	lights go off.
4. In avionics compartment - zone 122, actuate avionics lighting switch	- zones 121, 122, the seven dome lights come on.
5. In avionics compartment	- zone 121 - on LH electronics rack 80VU, voltage at terminals of receptacle 34LS2 is 28VDC. - voltage at terminals of receptacle 11LS is 28VDC. - zone 122 On RH electronics rack 90VU, voltage at terminals of receptacle 34LS1 is 28VDC. - Voltage at terminals of receptacle 12LS is 115VAC.

(3)Close-up
(a)De-energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(b)Restore system and aircraft to normal operating condition.
(c)Remove all ground handling and maintenance equipment, standard and special tools, together with ground power equipment, all access equipment and miscellaneous items.

2. Functional Test
(Ref. Operational Test)

3. System Test
(Ref. Operational Test)

LIGHT (13LS, 14LS) - REMOVAL/INSTALLATION

1. Reason for the Job
   Removal/Installation of a light in air conditioning compartment (13LS and 14LS).

2. Equipment and Materials

ITEM	DESIGNATION
A.	Circuit Breaker Safety Clips
B.	Access Platform 2,60 m (8 ft. 8 in.)
Referenced Procedures	
- 24-41-00, P. Block 301	AC External Power Control
- 32-12-11, P. Block 301	Main Gear Main Door (Ground Door(s) Opening)

3. Procedure
   (Ref. Fig. 401)

A. Job Set-Up
(1)Open, safety and tag the following circuit breaker :

PANEL	SERVICE	IDENT.	LOCATION
132VU	LIGHTING/DOME/LDG GEAR &/AIR COND COMPT	4LM	322/N83

(2)Open one main gear door (Ref. 32-12-11, P. Block 301), observing safety regulations.
(3)Open access door 147BZ.

B. Removal

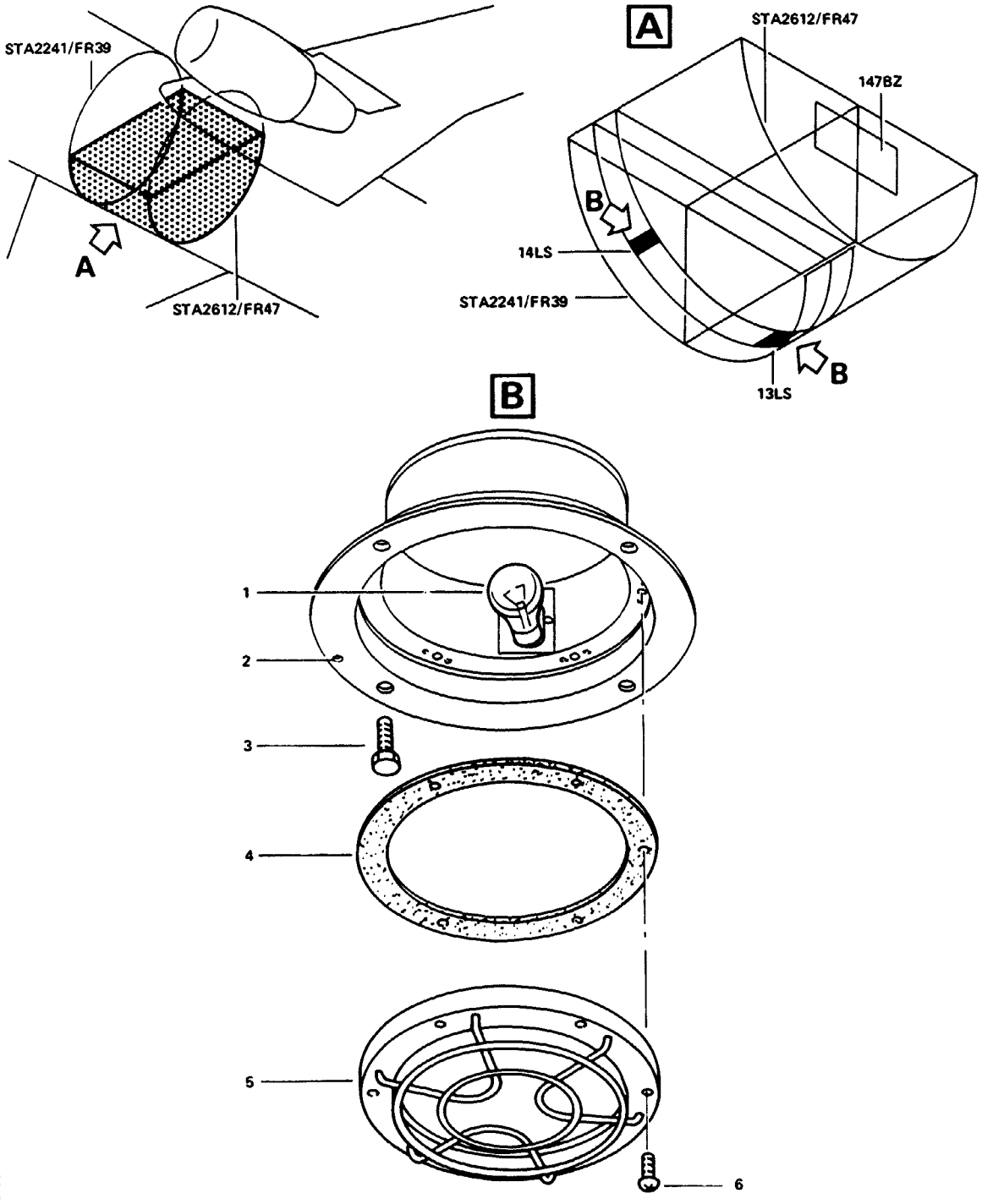
R CAUTION : DO NOT TOUCH THE LAMP GLASS WITH YOUR FINGERS.
R THE OILS FROM YOUR SKIN WILL QUICKLY CAUSE DETERIORATION OF THE
R LAMP.
R IF YOU ACCIDENTALLY TOUCH THE LAMP GLASS, CLEAN IT WITH A
R LINT-FREE CLOTH.

(1)Disconnect electrical wire.
(2)Remove screws (6).
(3)Remove lens assembly (5) including gasket (4).
(4)Remove bulb (1) from socket.
(5)Remove screws (3).
(6)Remove light (2).

C. Installation

R CAUTION : DO NOT TOUCH THE LAMP GLASS WITH YOUR FINGERS.
R THE OILS FROM YOUR SKIN WILL QUICKLY CAUSE DETERIORATION OF THE
R LAMP.
R IF YOU ACCIDENTALLY TOUCH THE LAMP GLASS, CLEAN IT WITH A
R LINT-FREE CLOTH.

(1)Install light using screws (3).



Air Conditioning Compartment Light
Figure 401

(2)Install bulb (1).
(3)Install lens assembly (5) including gasket (4).
(4)Tighten lens cover using screws (6).
(5)Connect electrical wire.

D. Test
(1)Initial conditions
- correct electrical power supply
- forward services ventilation system in operation.
(2)Close circuit breaker 4LM.
(3)Place COND BAY LT switch in up position.
(4)Check that light comes on.
(5)Place COND BAY LT switch in down position.

E. Close-Up
(1)Make certain that working area is clean and clear of tools and miscellaneous items and equipment.
R CAUTION : MAKE SURE THAT ALL THE FASTENERS AND PIP PINS ARE CORRECTLY
R INSTALLED AND SECURED WHEN YOU INSTALL/CLOSE THE ACCESS DOORS/
R PANELS AT FR47.
(2)Close access door 147BZ.
(3)Close main gear door (Ref. 32-12-11, P. Block 301).
(4)De-energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).

LIGHTS (6LS, 9LS, 10LS, 27LS TO 30LS) - REMOVAL/INSTALLATION

1. Reason for the Job
   Removal/Installation of light in avionics compartment (6LS, 9LS, 10LS, 27LS, 28LS, 29LS, 30LS).

2. Equipment and Materials

ITEM	DESIGNATION
A.	Circuit Breaker Safety Clips
B.	Torque Wrench 0 to 2 m.daN (0 to 177 lbf. in.)
Referenced Procedure - 24-41-00, P. Block 301	AC External Power Control

3. Procedure
   (Ref. Fig. 401)

A. Job Set-Up
(1)Open, safety and tag the following circuit breakers :

PANEL	SERVICE	IDENT.	LOCATION
132VU	LIGHTING/DOME/AVNCS/COMPT	2LS	322/N82
132VU	LIGHTING/28VDC OUTLETS/COCKPIT & AVNCS/COMPT	3LS	322/N85

(2)Open access door 121BL.

B. Removal

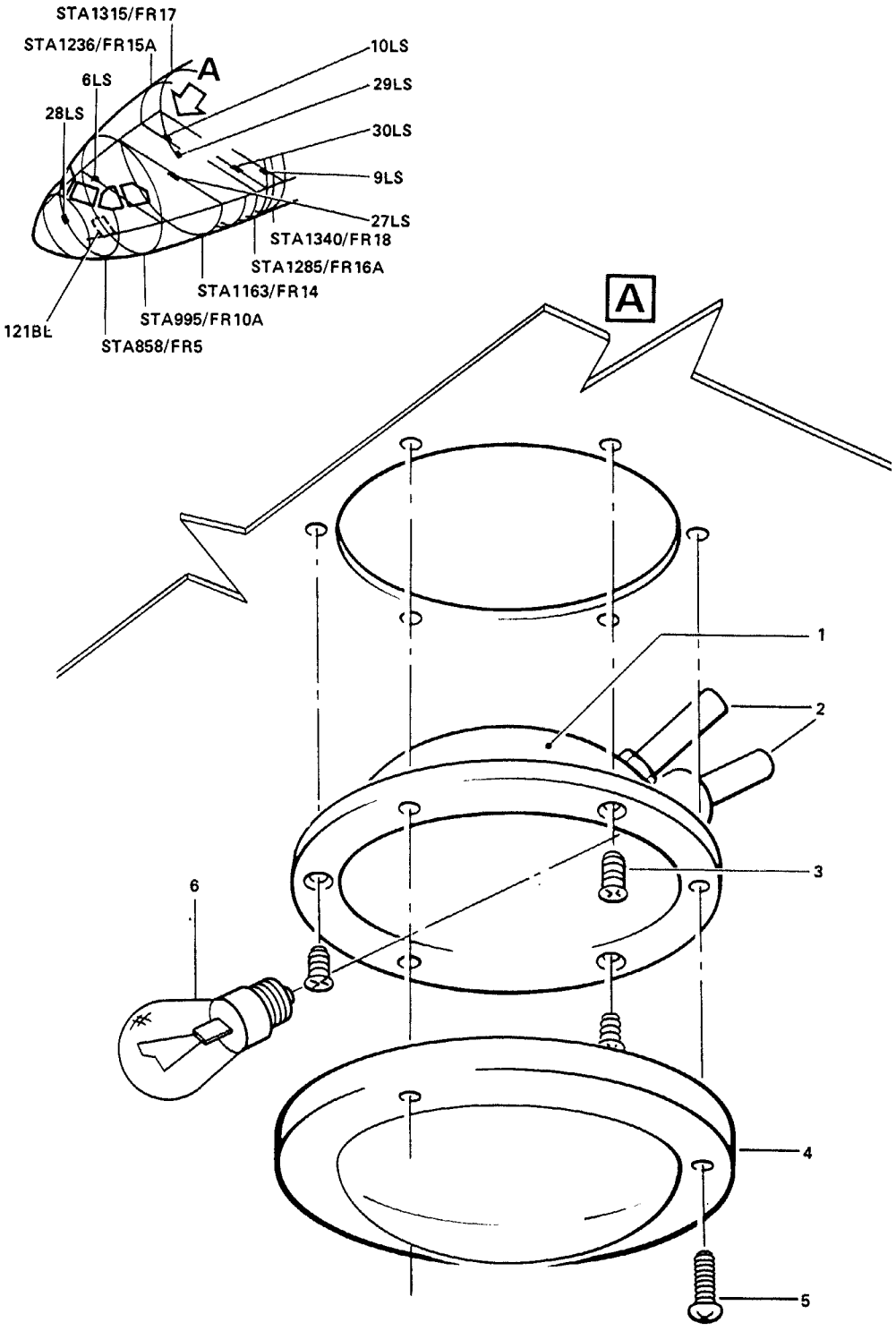
R CAUTION : DO NOT TOUCH THE LAMP GLASS WITH YOUR FINGERS.
R THE OILS FROM YOUR SKIN WILL QUICKLY CAUSE DETERIORATION OF THE
R LAMP.
R IF YOU ACCIDENTALLY TOUCH THE LAMP GLASS, CLEAN IT WITH A
R LINT-FREE CLOTH.

(1)Remove the three screws (5) from lens (4).
(2)Remove lens (4).
(3)Remove bulb (6).
(4)Remove the 3 attaching screws (3) from support (1).
(5)Remove light (1).
(6)Disconnect electrical wire (2).

C. Preparation of Replacement Component
(1)Make certain that exterior paintwork is not scratched or flaked.
(2)Make certain that reflector metal surface is in good condition.

D. Installation

R CAUTION : DO NOT TOUCH THE LAMP GLASS WITH YOUR FINGERS.
R THE OILS FROM YOUR SKIN WILL QUICKLY CAUSE DETERIORATION OF THE
R LAMP.



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Avionics Compartment Light
Figure 401

R IF YOU ACCIDENTALLY TOUCH THE LAMP GLASS, CLEAN IT WITH A
R LINT-FREE CLOTH.

(1)Connect electrical wire (2).
(2)Secure light (1) using the 3 screws (3).
(3)Install bulb (6).
(4)Install lens (4) using the 3 screws (5) and TORQUE to 0.1 m.daN (9 lbf. in.).

E. Test

(1)Initial conditions
- correct electrical power supply
- forward services ventilation system in operation.
(2)Remove safety clips and tags and close circuit breakers 2LS, 3LS and 50LE.
(3)Place AVNCS COMPT LT switch in up position.
(4)Make certain that light comes on.

F. Close-Up

(1)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(2)Close access door 121BL.
(3)De-energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).

WHEEL WELL LIGHTING - DESCRIPTION AND OPERATION

1. General

This chapter deals with :

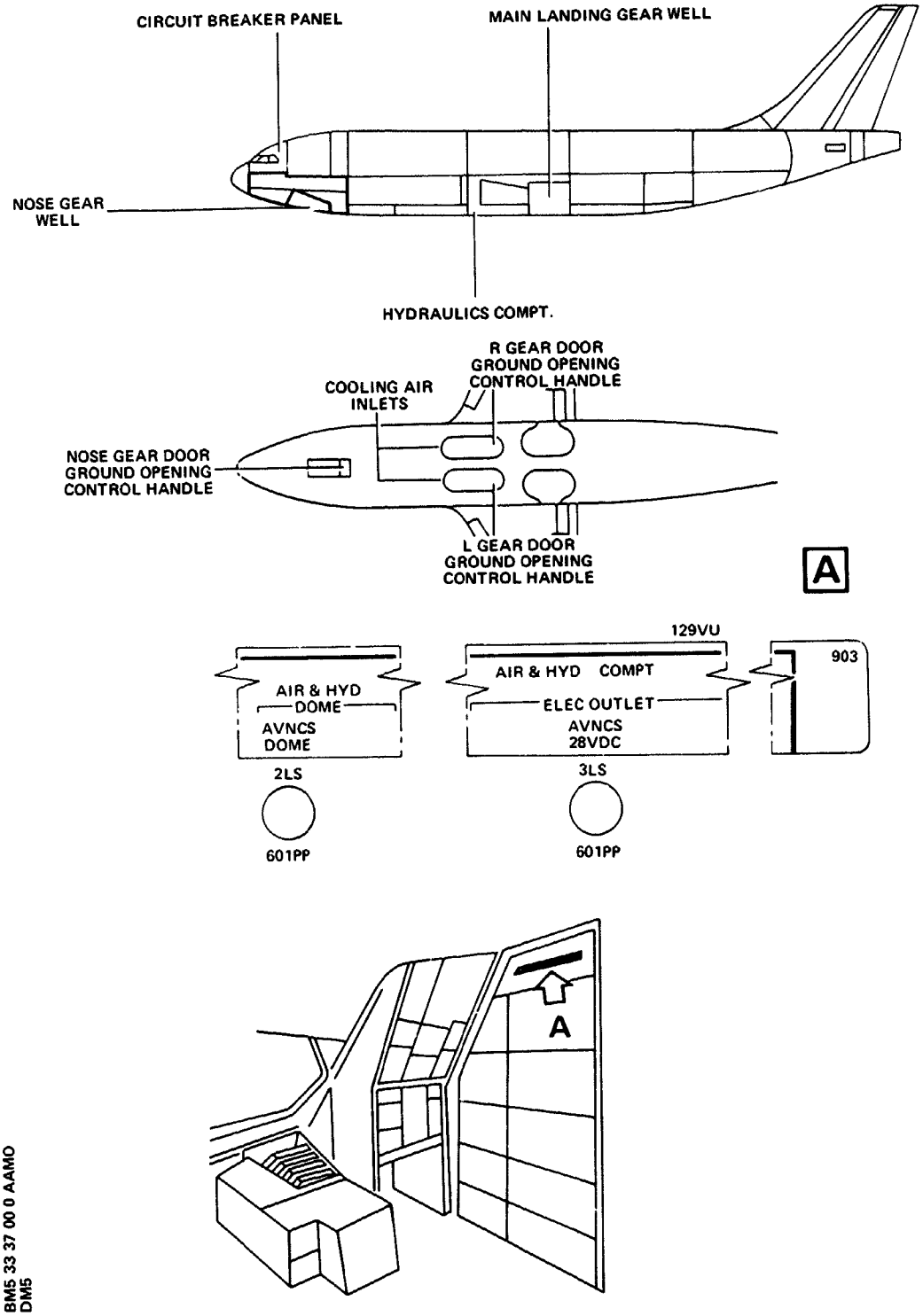
A. - lighting which is provided
- in the nose gear well
- in the main landing gear well and hydraulics compartment.

B. - Electrical outlets

2. Component Location

(Ref. Fig. 001)

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF.
6LM	OUTLET-28VDC, NLG WELL		123		
7LM	OUTLET-28VDC, HYD COMPT		147		
8LM	OUTLET-28VDC, HYD COMPT		148		
9LM	LIGHT-DOME, NLG WELL		123		33-37-12
10LM	LIGHT-DOME, HYD COMPT		148		33-37-13
11LM	LIGHT-DOME, L MLG WELL		571		33-37-11
12LM	LIGHT-DOME, R MLG WELL		671		33-37-11
13LM	LIGHT-DOME, HYD COMPT		147		33-37-13
24LM	SWITCH-LIGHT, NLG WELL		124		
25LM	SWITCH-HYD BAY LT		143		
26LM	SWITCH-HYD BAY LT		144		



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Wheel Well Lighting - Component Location
Figure 001

3. Nose Gear Well Lighting

A dome light 9LM provides nose gear well lighting. This lighting is controlled by a switch located inside the nose gear well, at right aft side. This dome light is supplied with 28VDC by busbar 503PP (ground busbar only). The dome light is of the explosion proof type and sealed.
The diffuser is made of high-resistance glass and a protective grille is welded to the dome light body. The dome light is fitted with a long-life 18W lamp.
(Ref. Fig. 002)
The nose gear well is provided with a 28VDC electrical outlet supplied only on the ground by busbar 503PP.
This outlet is capable of supplying an apparatus provided with a power lower than or equal to 280W.

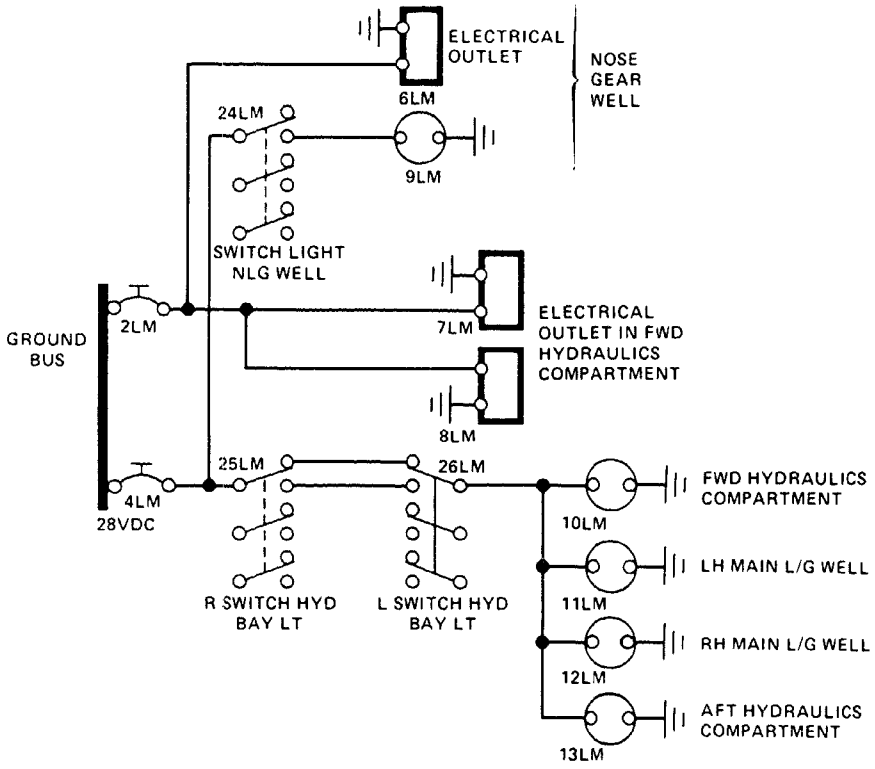
Electrical power
- Dome light : 18W
- Electrical outlet : 280W

4. Main Landing Gear Well Lighting

(Ref. Fig. 002)
Four dome lights provide lighting in main landing gear well and hydraulics compartment.
The dome lights are controlled by a two-way system ; both switches are located in right and left cooling air inlets close to the gear door ground opening control handles, in zones 143 and 144.
These dome lights are of the same type as that used in nose gear well.
They are supplied with 28VDC, only on the ground, by busbar 503PP.
Two electrical outlets are provided in hydraulics compartment in zones 147 and 148.
These outlets are supplied only on the ground by busbar 503PP. Each one allows to supply a device the power of which will not exceed 280W.

Electrical power

4 dome lights	4 x 18W = 72W
2 electrical outlets	2 x 280W = 560W



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Nose Gear Well and Main Landing Gear Well Lighting - Simplified Diagram
Figure 002

1. Functional Test

A. Reason for the Job
To check correct operation of lighting and electrical receptacles located in nose gear well, hydraulics compartment and left and right main gear wells.

B. Equipment and Materials

ITEM	DESIGNATION
(1)	AC/DC Voltmeter (115VAC - 28VDC)
Referenced Procedures	
- 24-41-00, P. Block 301	AC External Power Control
- 32-12-11, P. Block 301	Main Gear Main Door - (Ground Door(s) Opening)

C. Procedure
(1)Job Set-up
(a)Energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(b)Make certain that electronics racks ventilation is correct.
(c)Open main landing gear doors (Ref. 32-12-11, P. Block 301).
(d)Make certain that the following circuit breakers are closed :

PANEL	SERVICE	IDENT.	LOCATION
132VU	LIGHTING/28VDC OUTLETS/LDG GEAR &/AIR COND COMPT	2LM	322/N84
132VU	LIGHTING/DOME/LDG GEAR &/AIR COND COMPT	4LM	322/N83

(2)Test

ACTION	RESULT
1. In nose gear well - place nose gear well light switch in ON position	- light comes on - voltage at terminals of receptacle 6LM is 28VDC.
2. In hydraulics compartment - zone 143 (144), actuate hydraulics compartment lighting switch.	- the two hydraulics compartment lights and left and right main gear well lights, come on.
- zone 144 (143), actuate hydraulics compartment lighting switch.	- the four lights go off.
- zone 143 (144), actuate hydraulics compartment lighting switch.	- the four lights come on.

ACTION	RESULT
	In hydraulics compartment In zone 147 - voltage at terminals of receptacle 7LM is 28VDC In zone 148 - voltage at terminals of receptacle 8LM is 28VDC.

(3)Close-up
(a)Close main landing gear doors.
(b)De-energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(c)Restore system and aircraft to normal operating condition.

LIGHT DOME, L AND R MLG WELL 11LM (12LM) - REMOVAL/INSTALLATION

1. Reason for the Job

A. Removal/Installation of a light in main landing gear well (11LM, 12LM).

2. Equipment and Materials

ITEM	DESIGNATION
A.	Circuit Breaker Safety Clips
B.	Access Platform 2.60 m (8ft. 8in.)
Referenced Procedures	
- 24-41-00, P. Block 301	AC External Power Control
- 32-12-11, P. Block 301	Main Gear Main Door - (Ground Door(s) Opening)

3. Procedure

R (Ref. Fig. 401)

A. Job Set-Up

(1)Open, safety and tag the following circuit breaker :

PANEL	SERVICE	IDENT.	LOCATION
132VU	LIGHTING/DOME/LDG GEAR &/AIR COND COMPT	4LM	322/N83

(2)Position access platform.

(3)Open one main gear door (Ref. 32-12-11, P. Block 301), observing safety precautions.

B. Removal

R CAUTION : DO NOT TOUCH THE LAMP GLASS WITH YOUR FINGERS.
R THE OILS FROM YOUR SKIN WILL QUICKLY CAUSE DETERIORATION OF THE
R LAMP.
R IF YOU ACCIDENTALLY TOUCH THE LAMP GLASS, CLEAN IT WITH A
R LINT-FREE CLOTH.

(1)Remove screws (6).

(2)Remove lens assembly (5) (comprising cover, spacers, lens, plate and gasket).

(3)Remove bulb (2) from socket.

(4)Remove screws (4) and remove light (3).

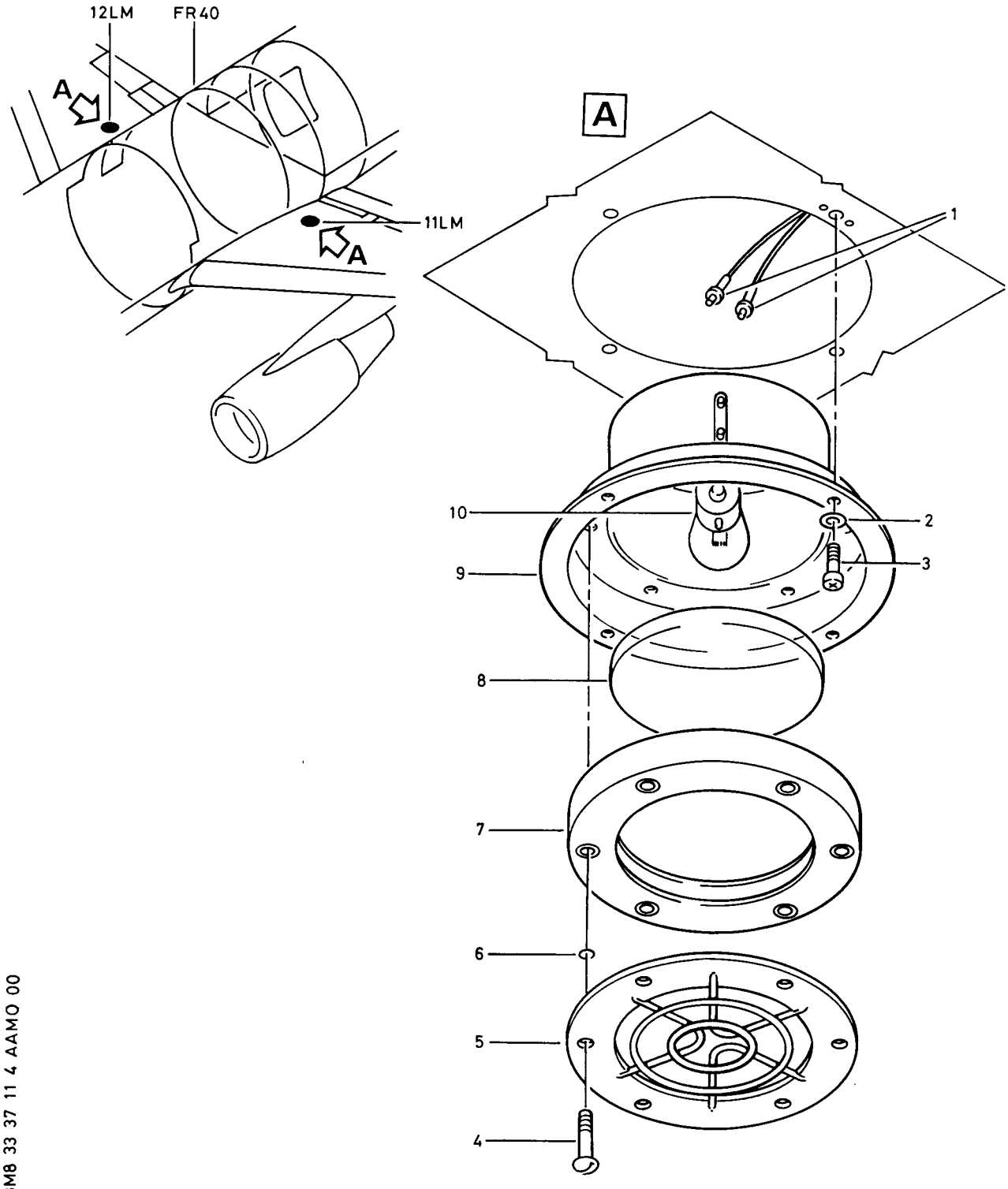
(5)Disconnect electrical connector (1).

C. Installation

R CAUTION : DO NOT TOUCH THE LAMP GLASS WITH YOUR FINGERS.
R THE OILS FROM YOUR SKIN WILL QUICKLY CAUSE DETERIORATION OF THE
R LAMP.
R IF YOU ACCIDENTALLY TOUCH THE LAMP GLASS, CLEAN IT WITH A
R LINT-FREE CLOTH.

(1)Connect electrical connector (1).

(2)Install light (3) and tighten screws (4).



Main Landing Gear Well Lighting - Light Replacement
Figure 401

(3)Install bulb (2) in socket.
(4)Install lens assembly (5) (comprising cover, spacers, lens, plate and gasket).
(5)Install and tighten attaching screws (6) of lens assembly.

D. Test
(1)Initial Conditions
- correct electrical power supply
- forward services ventilation system in operation.
(2)Close circuit breaker 4LM.
(3)Open access door 143EL to main door control handle.
(4)Place HYDRAULIC LT switch located in main gear door control handle boss in up position.
(5)Check that light comes on.
(6)Place HYDRAULIC LT switch in OFF position.

E. Close-Up
(1)Check that working area is clean and clear of tools and miscellaneous items of equipment.
(2)Close main gear door (Ref. 32-12-11, P. Block 301).
(3)De-energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(4)Close access door 143EL to main gear door control handle.
(5)Remove access platform.

NOSE LANDING GEAR WELL DOME LIGHT - REMOVAL/INSTALLATION

1. Reason for the Job
Removal/Installation of nose landing gear well light (9LM).

2. Equipment and Materials

ITEM	DESIGNATION
A.	Circuit Breaker Safety Clips
Referenced Procedures	
- 24-41-00, P. Block 301	AC External Power Control
- 32-22-11, P. Block 301	Nose Gear Main Door - (Ground Door(s) Opening)

3. Procedure
(Ref. Fig. 401)

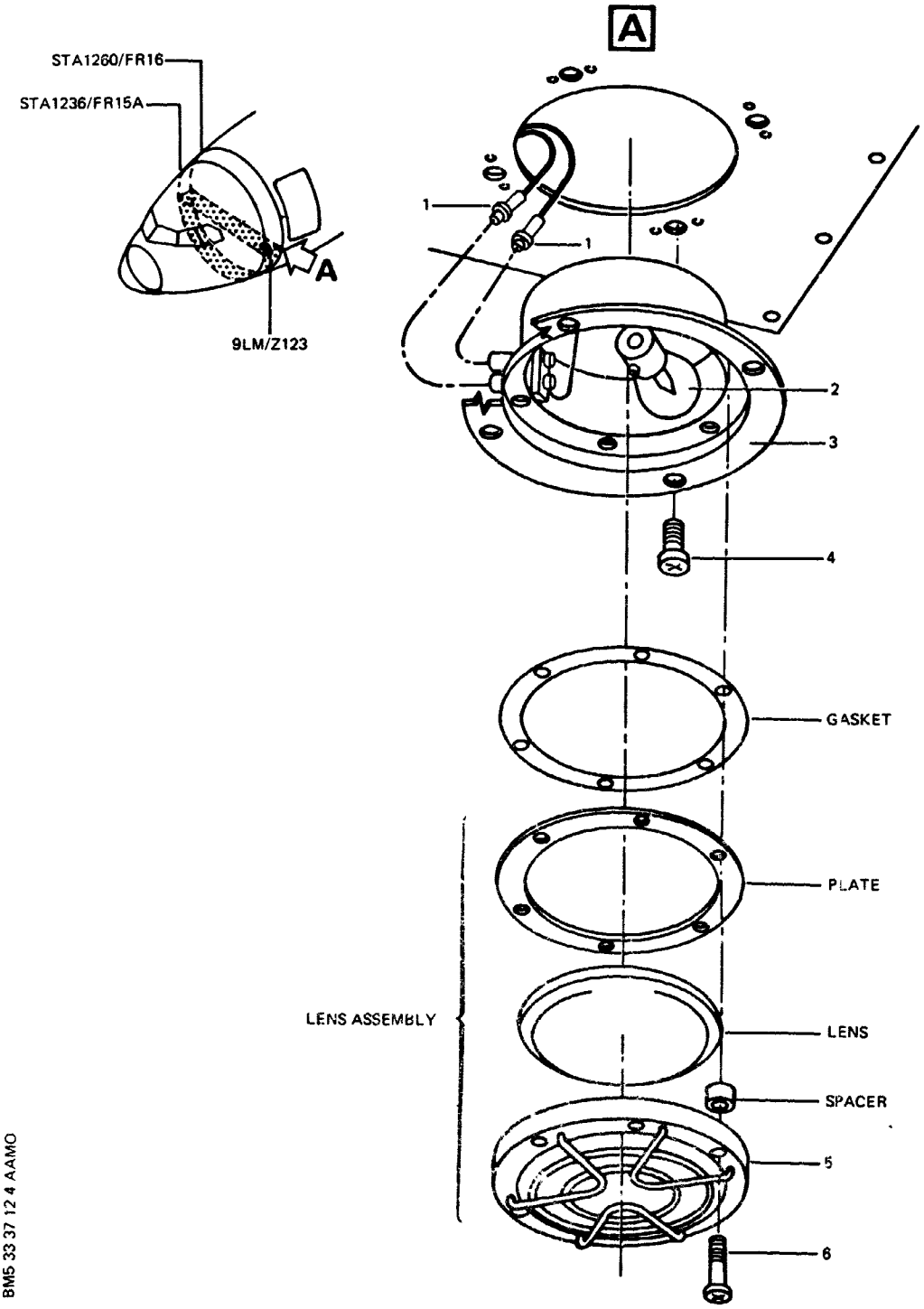
A. Job Set-Up
(1)Open, safety and tag the following circuit breaker :

PANEL	SERVICE	IDENT.	LOCATION
132VU	LIGHTING/DOME/LDG GEAR &/AIR COND COMPT	4LM	322/N83

(2)Open nose gear doors, observing safety regulations (Ref. 32-22-11, P. Block 301).

B. Removal
R CAUTION : DO NOT TOUCH THE LAMP GLASS WITH YOUR FINGERS.
R THE OILS FROM YOUR SKIN WILL QUICKLY CAUSE DETERIORATION OF THE
R LAMP.
R IF YOU ACCIDENTALLY TOUCH THE LAMP GLASS, CLEAN IT WITH A
R LINT-FREE CLOTH.
(1)Remove screws (6).
(2)Remove lens assembly (including cover (5), spacers, lens, plate and gasket).
(3)Remove bulb (2) from socket.
(4)Remove screws (4) and light (3).
(5)Disconnect connector (1).

C. Installation
R CAUTION : DO NOT TOUCH THE LAMP GLASS WITH YOUR FINGERS.
R THE OILS FROM YOUR SKIN WILL QUICKLY CAUSE DETERIORATION OF THE
R LAMP.
R IF YOU ACCIDENTALLY TOUCH THE LAMP GLASS, CLEAN IT WITH A
R LINT-FREE CLOTH.
(1)Connect connector (1).
(2)Install light (3) and tighten screws (4).
(3)Install bulb (2) in support.
(4)Install lens assembly (including cover (5), spacers, lens, plate and gasket).



Nose Gear Well Lighting - Light Replacement
Figure 401

(5)Install and tighten attaching screws (6) of lens assembly.

D. Test
(1)Initial conditions
- correct electrical power supply
- forward services ventilation system in operation.
(2)Close circuit breaker 4LM.
(3)Place LIGHT switch located in nose gear well in up position.
(4)Check that light comes on.
(5)Place LIGHT switch in down position.

E. Close-Up
(1)Check that working area is clean and clear of tools and miscellaneous items of equipment.
(2)Close nose gear door (Ref. 32-22-11, P. Block 301).
(3)De-energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).

HYDRAULICS COMPARTMENT DOME LIGHT (10LM, 13LM) - REMOVAL/INSTALLATION

1. Reason for the Job
Removal/Installation of light in hydraulics compartment (10LM, 13LM).

2. Equipment and Materials

ITEM	DESIGNATION
A.	Circuit Breaker Safety Clips
B.	Access Platform 2.60 m (8 ft. 8 in.)
Referenced Procedures	
- 24-41-00, P. Block 301	AC External Power Control
- 32-12-11, P. Block 301	Main Gear Main Door - (Ground Door(s) Opening)

3. Procedure
(Ref. Fig. 401)

A. Job Set-Up
(1)Open, safety and tag the following circuit breaker

PANEL	SERVICE	IDENT.	LOCATION
132VU	LIGHTING/DOME/LDG GEAR &/AIR COND COMPT	4LM	322/N83

(2)Open one main gear door (Ref. 32-12-11, P. Block 301), observing safety regulations.

B. Removal

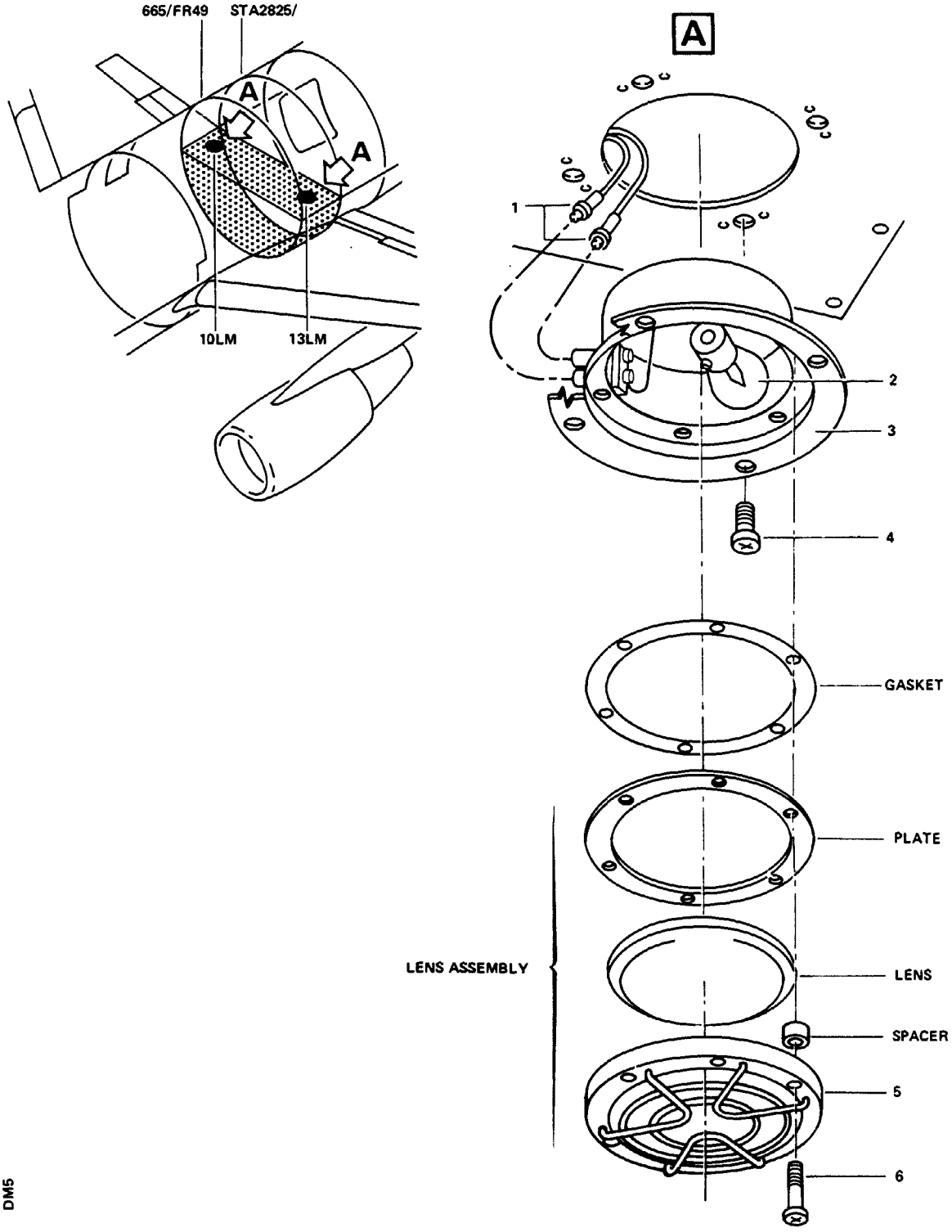
R CAUTION : DO NOT TOUCH THE LAMP GLASS WITH YOUR FINGERS.
R THE OILS FROM YOUR SKIN WILL QUICKLY CAUSE DETERIORATION OF THE
R LAMP.
R IF YOU ACCIDENTALLY TOUCH THE LAMP GLASS, CLEAN IT WITH A
R LINT-FREE CLOTH.

(1)Remove screws (6).
(2)Remove lens assembly (5) (comprising cover, spacers, lens, plate and gasket).
(3)Remove bulb (2) from socket.
(4)Remove screws (4) and remove light (3).
(5)Disconnect electrical connector (1).

C. Installation

R CAUTION : DO NOT TOUCH THE LAMP GLASS WITH YOUR FINGERS.
R THE OILS FROM YOUR SKIN WILL QUICKLY CAUSE DETERIORATION OF THE
R LAMP.
R IF YOU ACCIDENTALLY TOUCH THE LAMP GLASS, CLEAN IT WITH A
R LINT-FREE CLOTH.

(1)Connect electrical connector (1).
(2)Install light (3) and tighten screws (4).
(3)Install bulb (2) in socket.
(4)Install lens assembly (5) (comprising cover, spacers, lens, plate and



Hydraulics Compartment Light
Figure 401

gasket).
(5)Install and tighten attaching screws (6) of lens assembly.

D. Test
(1)Initial conditions
- correct electrical power supply
- forward services ventilation system in operation.
(2)Close circuit breaker 4LM.
(3)Open access door to main door control handle 143EL.
(4)Place HYDRAULIC LT switch located in the main gear door control handle boss in up position.
(5)Check that light comes on.
(6)Place HYDRAULIC LT switch in OFF position.

E. Close-Up
(1)Check that working area is clean and clear of tools and miscellaneous items of equipment.
(2)Close main gear door (Ref. 32-12-11, P. Block 301).
(3)De-energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(4)Close access door to main gear door control handle 143EL.

EXTERIOR - DESCRIPTION AND OPERATION

1. General

The exterior lights system is designed to provide the following:
- lights to illuminate the runway and taxiway forward of the aircraft
- lights to illuminate certain areas of the aircraft surface
- lights to give an indication of aircraft position and to reduce the possibility of collision

2. Description and Operation

The exterior lights are all controlled by toggle switches on overhead panel **EXT LT (426VU)** and consist of the following systems: (Ref. Fig. 001)

A. Landing Lights

Two landing lights are installed in the underside of the aircraft wings to provide adequate lighting to illuminate the runway when the aircraft is landing at night. Each light has a separate control switch and the lights can be extended at all aircraft speeds either with the lamps on or off. The lamps go off automatically when the lights are retracted.

B. Taxi and Takeoff Lights

The two taxi and takeoff lights are fixed units, installed on the nose landing gear to provide adequate lighting to illuminate runway and taxiway in front of the aircraft. Each light unit has a double (400/600 Watt) filament lamp. The 400 Watt filaments in both light units come on when the single control switch **NOSE** is placed in the **TAXI** position. The 400 and 600 Watt filaments in both light units come on when the control switch **NOSE** is placed in **TO** position. To ensure that the lights do not come on with the landing gear retracted, the power supply for the lights is also controlled by the landing gear microswitch.

C. Runway Turnoff Lights

Two runway turnoff lights are installed on each side of the forward fuselage. They are designed to provide wide-angle illumination of the areas on each side of the runway and taxiways. Each light is controlled by a separate switch **RWY TURN OFF L** or **R**.

D. Engine and Wing Scan Lights

Two engine and two wing scan lights are installed, one of each, on both sides of the forward fuselage. They are designed to illuminate the engine intakes and the wing leading edges, so that an examination of these areas may be carried out, for example, to determine the degree of icing. The lights are controlled by a single switch **WING**.

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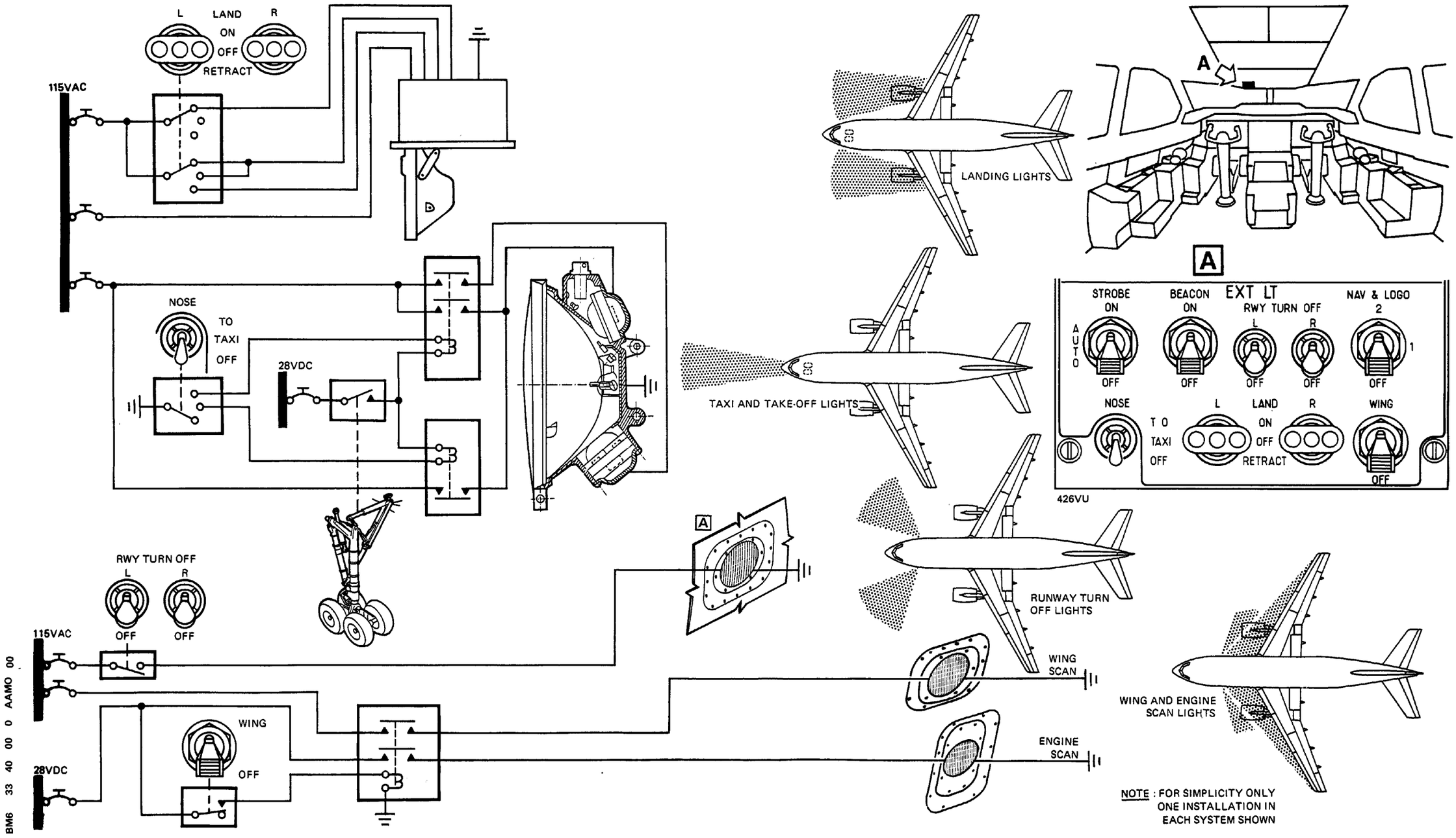

Exterior - Block Schematic (Para A. thru D.)
Figure 001

R **ON A/C 101-200,

(Ref. Fig. 002)

R **ON A/C 001-100,

(Ref. Fig. 003)

R **ON A/C ALL

E. Logo Lights
Four logo lights are installed, in pairs, on each of the horizontal stabilizers to illuminate the airline emblem on the vertical stabilizer. The lights are controlled by the **NAV & LOGO** switch when the slats are extended and/or the landing gear struts are compressed.

R **ON A/C 101-200,

F. Anti-Collision Lights
The anti-collision lights consist of an upper and a lower fuselage-mounted red flashing beacon light, and a forward facing and a rearward facing wing tip-mounted white flashing strobe light. The beacon lights are high-intensity discharge lamps, the energy being supplied by a separate power unit. The lights are controlled by a single switch **BEACON**. The strobe lights are also high intensity discharge lamps but the power supply unit is an integral part of the light unit. The rearward facing strobe light is combined with the rearward facing navigation light to form a single unit. The lights are controlled by the **STROBE** switch in the **ON** position and by the landing gear **MICRO** switch (L/G extended) when the **STROBE** switch is in the **AUTO** position.

R **ON A/C 001-100,

F. Anti-Collision Lights
The anti-collision lights consist of an upper and a lower fuselage-mounted red flashing beacon light, single rearward and double forward facing wing tip mounted white strobe lights. The lights are high-intensity discharge lamps, the energy being supplied by separate power units and control assemblies. The rearward facing strobe lights are combined with the navigation lights to form a single unit. The two light systems are controlled by separate switches but are timed to operate in synchronisation.
(1) The beacon lights come on when the **BEACON** switch is placed to **ON** position.
(2) The strobe lights come on when the **STROBE** switch is placed to **ON** position. In the **AUTO** position, with the aircraft on ground, the lights are off. When the landing gear strut is unloaded the lights come on automatically.

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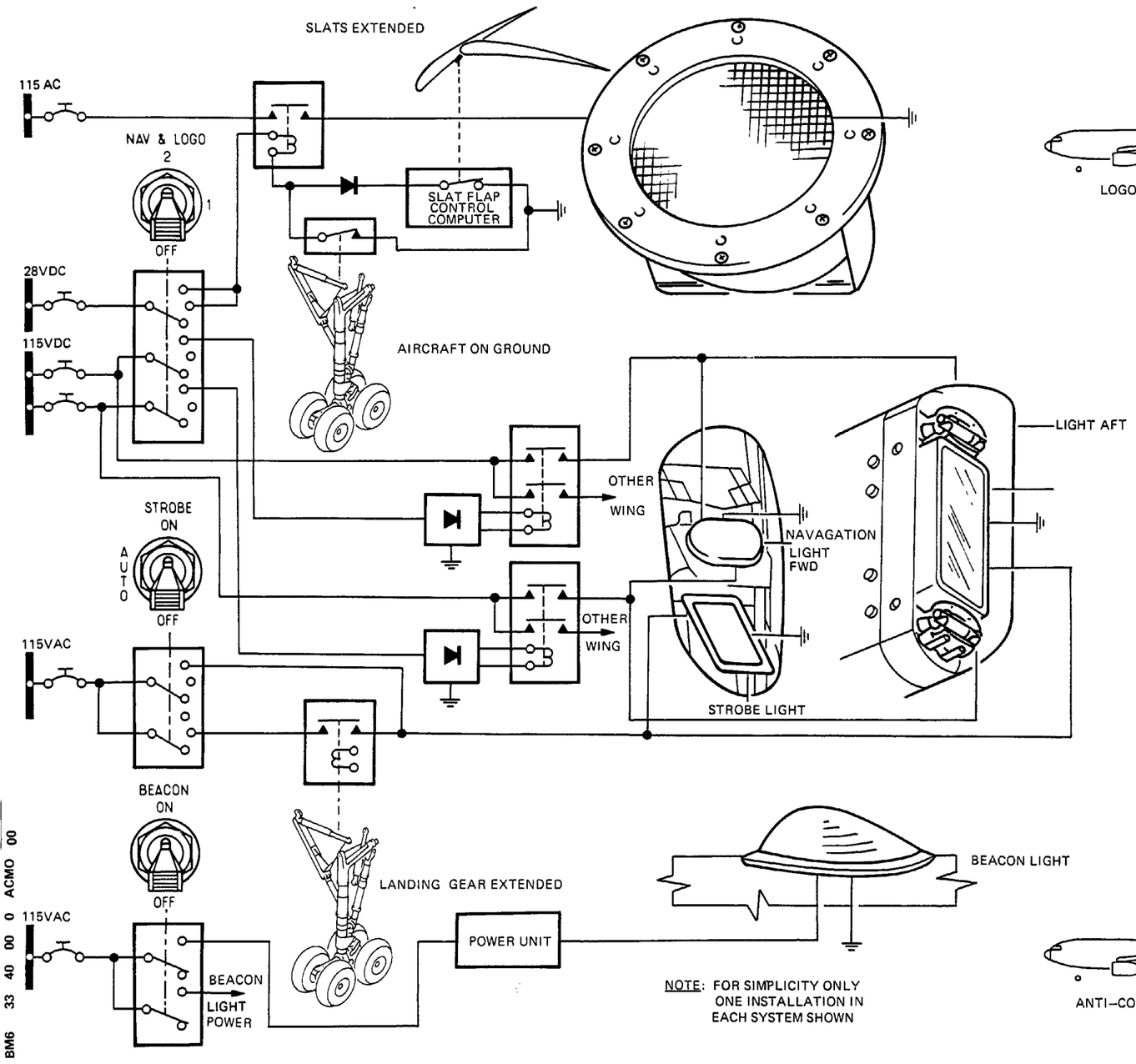

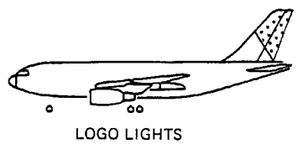

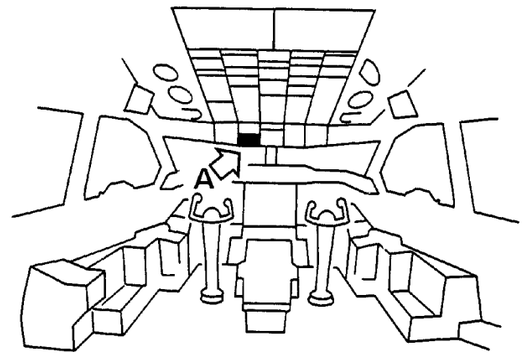

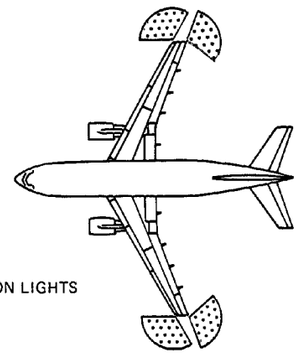

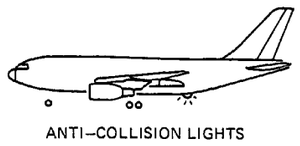

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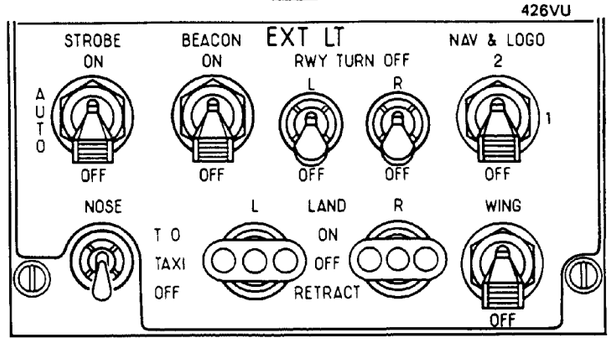
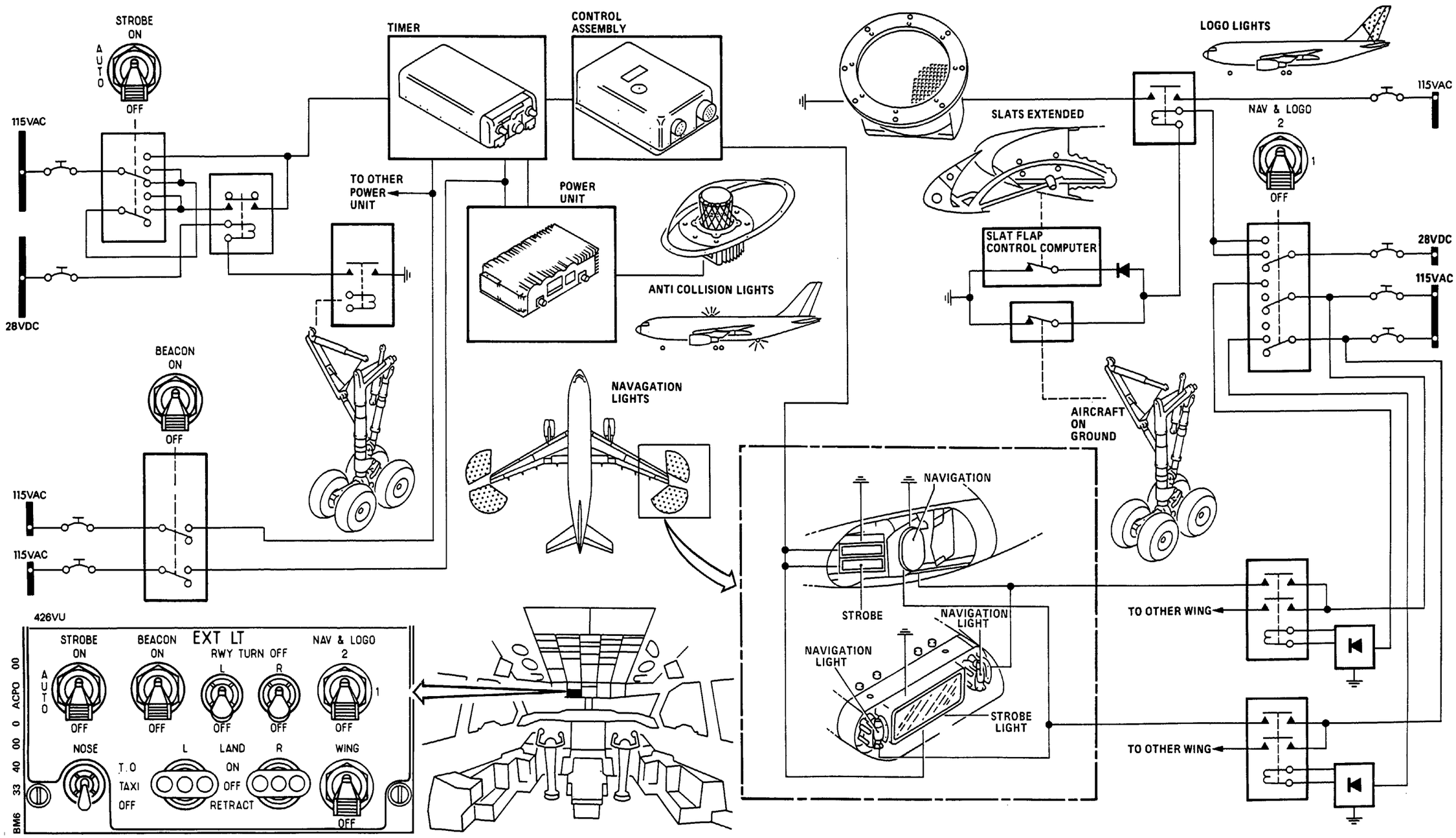


Exterior - Block Schematic (Para E. thru G.)
Figure 002



Exterior - Block Schematic (Para E. thru G.)
Figure 003

R **ON A/C ALL

G. Navigation Lights
The navigation lights consist of forward and rearward facing lights, installed in each wing tip. The forward facing lights are colored aviation red (LH) and aviation green (RH). Both the rearward facing lights are colored white. Each light unit contains two lamps, controlled by the NAV & LOGO switch.

NAVIGATION LIGHTS - DESCRIPTION AND OPERATION

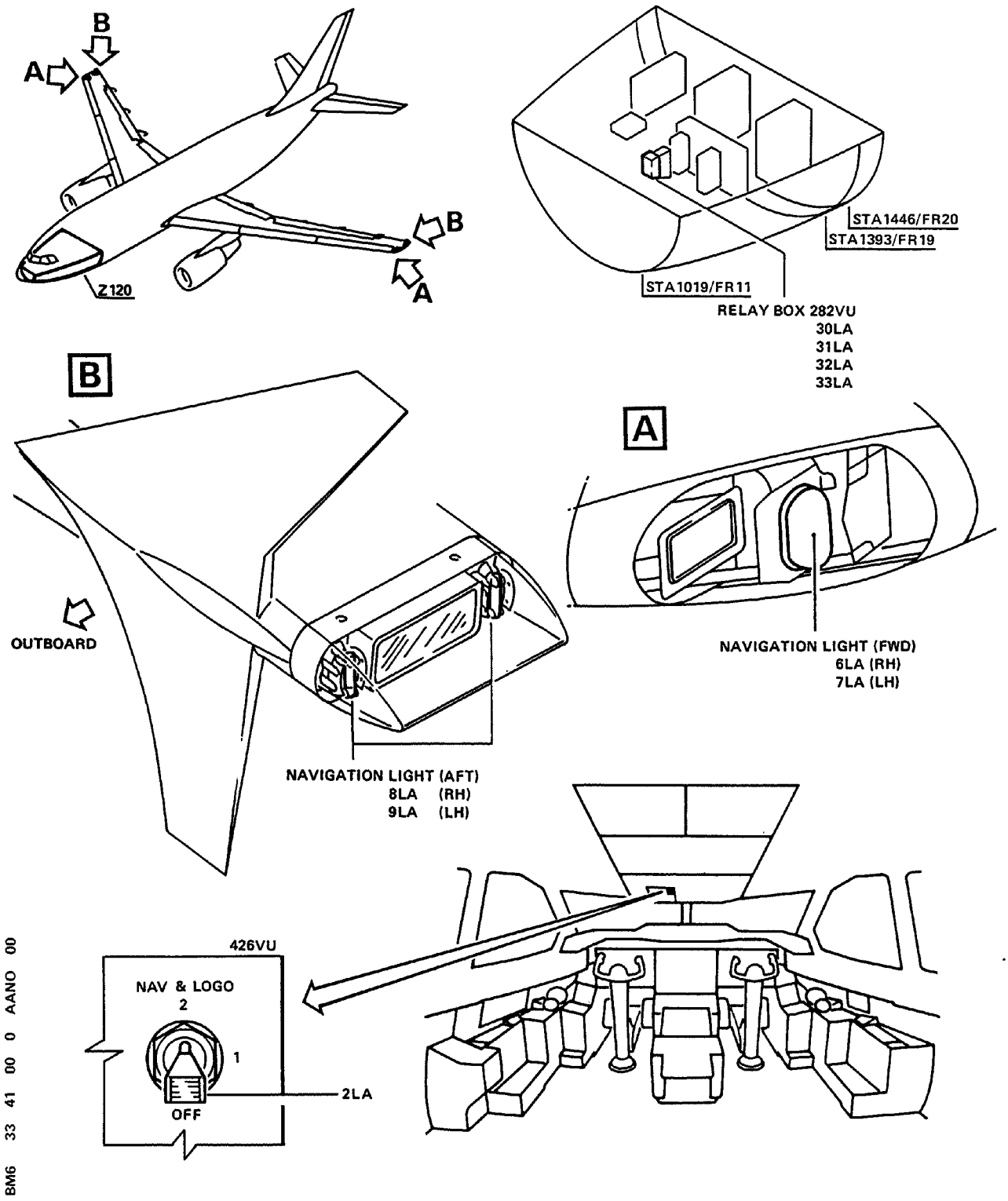
1. General

The position of the aircraft is indicated by navigation lights located at the forward and aft extremities of each wing tip.
The light is red on the LH forward extremity, green on the RH forward extremity and white on the aft extremities of each wing tip.

2. Component Location

(Ref. Fig. 001)

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF.
2LA	SWITCH NAV & LOGO	426VU	210		
6LA	LIGHT-NAVIGATION, RH WING, FORWARD		631		33-41-32
7LA	LIGHT-NAVIGATION, LH WING, FORWARD		531		33-41-32
8LA	LIGHT-NAVIGATION, RH WING, AFT		631		33-41-31
9LA	LIGHT-NAVIGATION, LH WING, AFT		531		33-41-31
30LA	RECTIFIER AND COIL ASSEMBLY	282VU	122		
31LA	RECTIFIER AND COIL ASSEMBLY	282VU	122		
32LA	RELAY	282VU	122		
33LA	RELAY	282VU	122		



Component Locations
Figure 001

3. Description

A. The navigation lighting system comprises:
- a red forward facing light (7LA) on the LH wing tip
- a green forward facing light (6LA) on the RH wing tip
- rearward facing white lights (9LA and 8LA) on the LH and RH wing tips
- a control toggle switch NAV & LOGO (2LA) installed in the overhead panel in the flight compartment. The switch positions are 2, 1 and OFF
- rectifier and coil assemblies (30LA and 31LA)
- power relays (32LA and 33LA).

B. Each navigation light contains two 100 W quartz lamps.

C. The system is supplied by 115 V AC busbars 103XP-A and 103XP-B via monitoring circuit breakers (11LA and 1LA) respectively. An annunciator labelled OPEN, comes on when a circuit breaker is open and the busbar energized.

4. Operation (Ref. Fig. 002)

A. When the busbars are energized and the circuit breakers closed, 115 V AC is supplied to the power relays (32LA, 33LA) and control switch NAV & LOGO (2LA).

B. Placing the switch NAV & LOGO in position 1 or 2, a single power relay is energized via the corresponding rectifier and coil assembly. The relay supplies 115 V AC to the stepdown transformers in each navigation light which reduces the voltage to 10 V AC and one lamp comes on.

C. The switch NAV & LOGO also controls the logo lights simultaneously.

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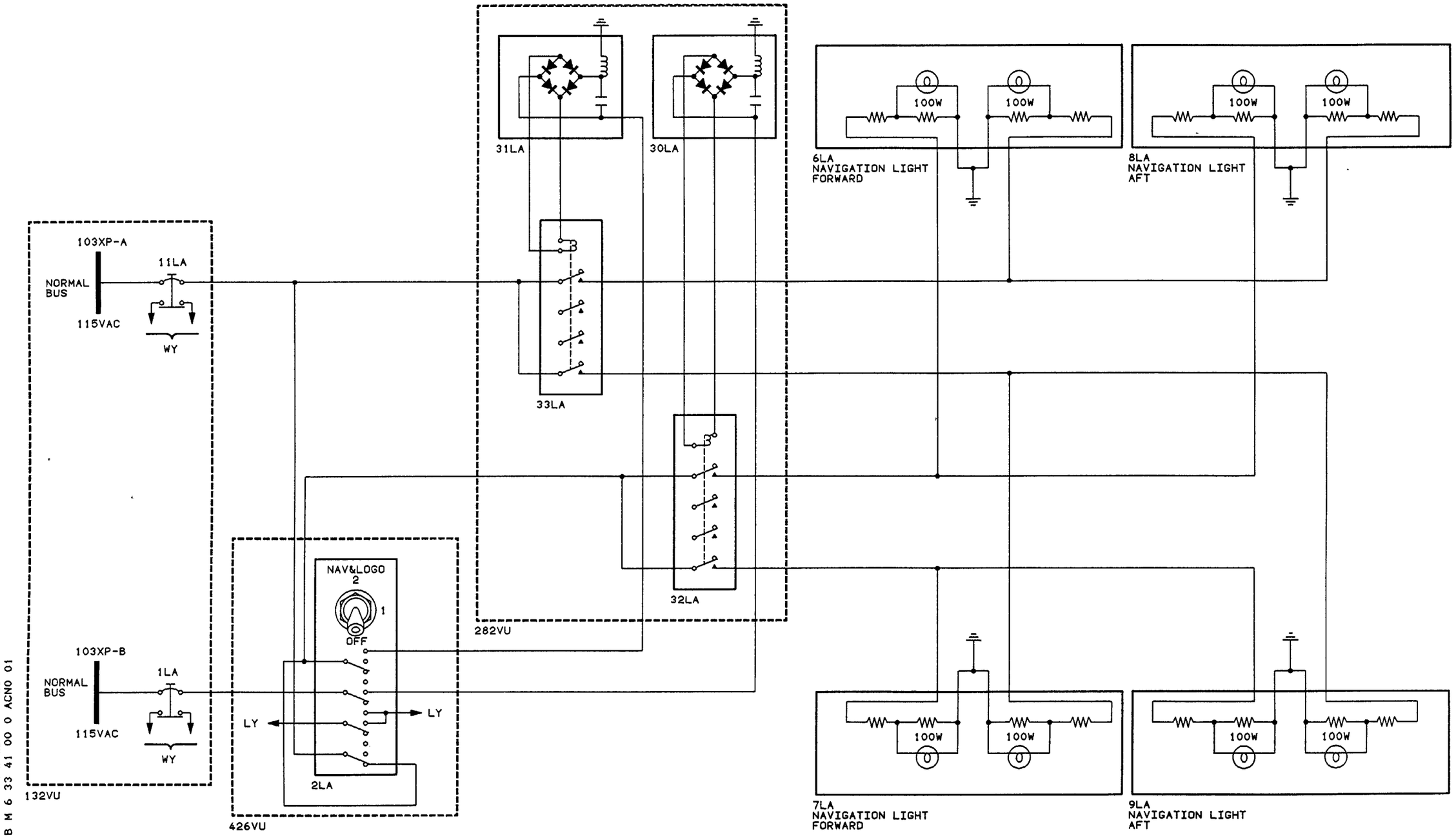


Navigation Lights - Schematic
Figure 002

1. Operational Test

A. Reason for the Job
Operational test of navigation lights.

B. Equipment and Materials

ITEM	DESIGNATION
(1)	Electrical Ground Power Unit - 3-Phase, 115/200 V, 400 Hz
Referenced Procedure - 24-41-00, P. Block 301	AC External Power Control

C. Procedure
(1)Job Set-up
(a)Connect electrical ground power unit and energize aircraft electrical network (Ref. 24-41-00, P. Block 301).
(b)Make certain that electronic racks ventilation is correct.
(c)Make certain that the following circuit breakers are closed:

PANEL	SERVICE	IDENT.	LOCATION
132VU	LIGHTING-EXTERIOR LT-NAV 1	11LA	N78
132VU	LIGHTING-EXTERIOR LT-NAV 2	1LA	N75

(2)Test

ACTION	RESULT
1. External light control panel 426VU: - place toggle switch 2LA NAV & LOGO in positions 1 and 2	Zones 531, 631: - navigation lights 6LA, 7LA, 8LA and 9LA come on.
2. External light control panel 426VU: - place toggle switch 2LA NAV & LOGO in OFF position.	Zones 531, 631: - navigation lights 6LA, 7LA, 8LA and 9LA go off.

(3)Close-up
(a)De-energize aircraft electrical network and disconnect ground power unit (Ref. 24-41-00, P. Block 301).

WARNING : BEFORE PROCEEDING WITH MAINTENANCE WORK ON OR NEAR MECHANICAL FLIGHT CONTROLS OR PRIMARY FLIGHT CONTROL SURFACES, LANDING GEARS, ASSOCIATED DOORS OR ANY MOVING COMPONENT, MAKE CERTAIN THAT GROUND SAFETIES AND OR WARNING NOTICES ARE IN CORRECT POSITION TO PREVENT INADVERTENT OPERATION OF CONTROLS.
BEFORE POWER IS SUPPLIED TO THE AIRCRAFT, MAKE CERTAIN THAT ELECTRICAL CIRCUITS UPON WHICH WORK IS IN PROGRESS ARE ISOLATED.

1. Reason for the Job

A. Replacement of defective high intensity quartz navigation lamp(s).

B. Replacement of defective strobe light high intensity lamp.

C. Removal of lamp(s) during trouble shooting checks.

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 6 m (19 ft. 8 in.)
C.	Circuit Breaker Safety Clips and Tags
B.	Soft, Lint-Free Cloth
D. Material No. 10-002	Anti-Icing and De-Icing Materials (Ref. 20-31-00)
Referenced Procedure - 24-41-00, P. Block 301	AC External Power Control

3. Procedure

R **ON A/C 101-200,

(Ref. Fig. 301)

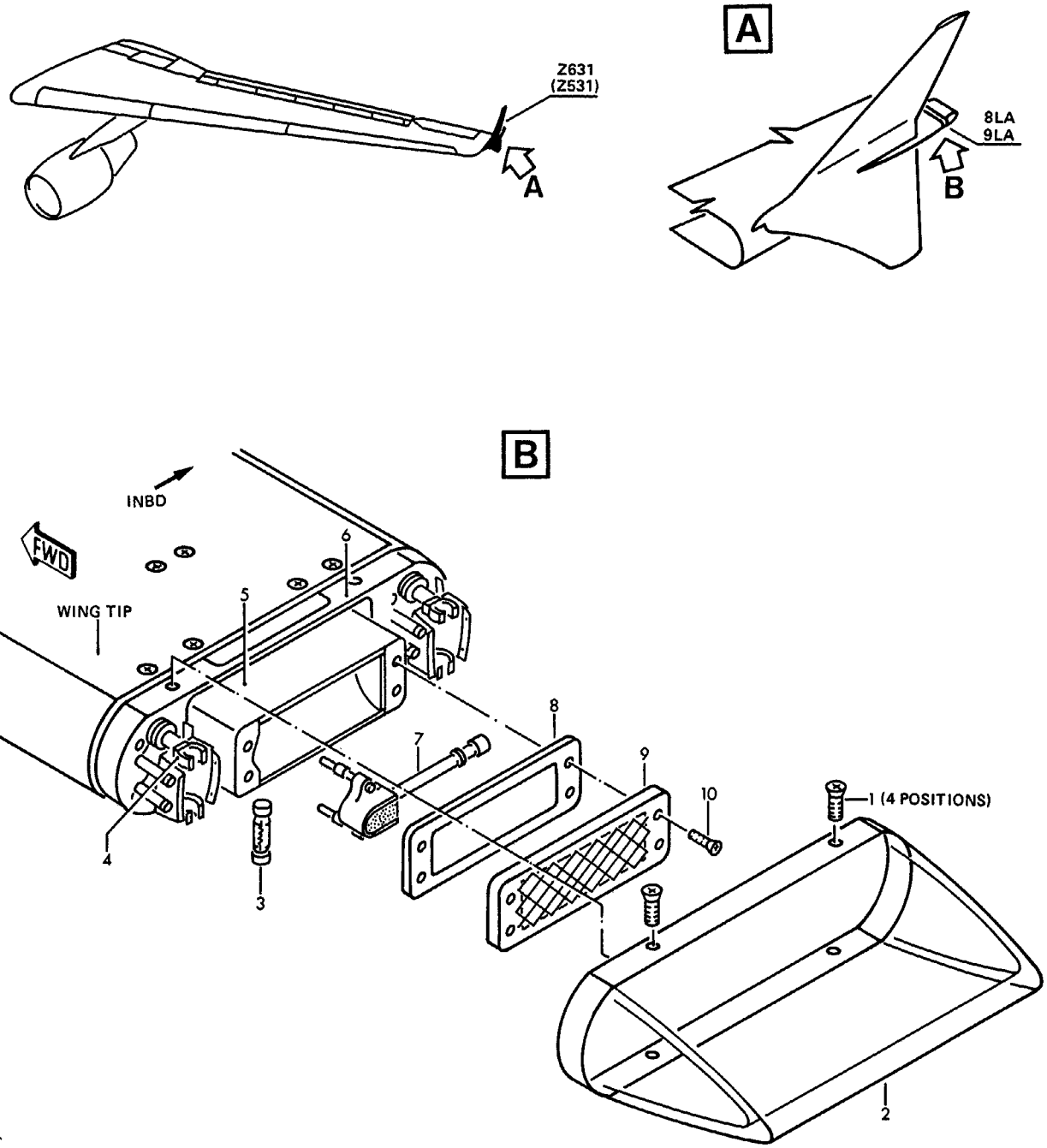
R **ON A/C 001-100,

(Ref. Fig. 302)

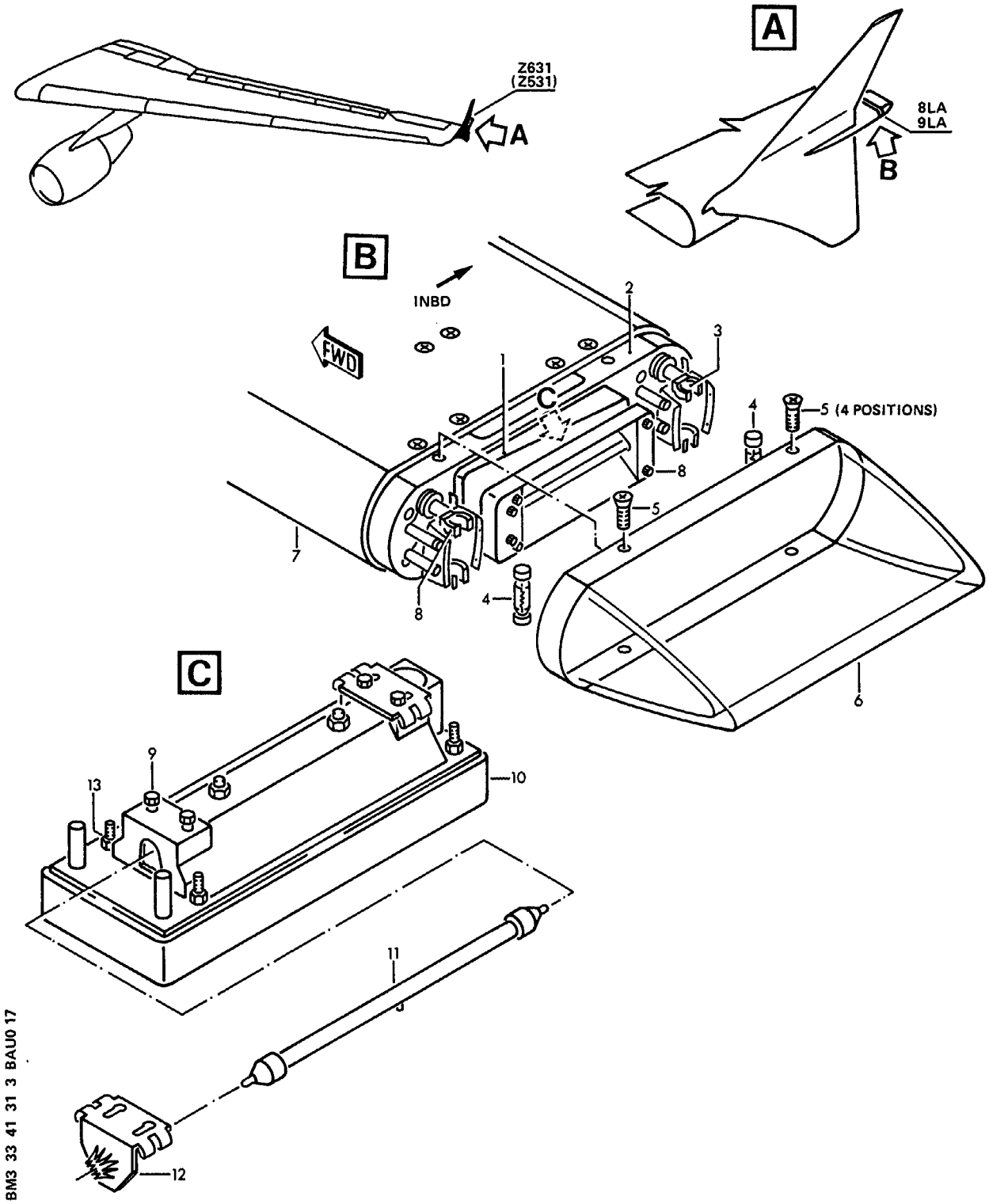
R **ON A/C ALL

A. Job Set-Up
(1)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
132VU	LIGHTING/EXT LT/NAV/2	1LA	322/N75
132VU	LIGHTING/EXT LT/NAV/1	11LA	322/N78
132VU	LIGHTING/EXT LT/STROBE	11LV	322/N79



Navigation and Strobe Light
Figure 301



Navigation and Strobe Light
Figure 302

R **ON A/C 101-200,

(2)Position access platform at rear of wing tip (zone 531/631).

B. Removal of High Intensity Quartz Navigation Lamp(s)
(1)Remove screws (1) and lens (2) from light assembly (6).
CAUTION : DO NOT TOUCH LAMP WITH BARE FINGERS. MOISTURE FROM THE SKIN MAY CAUSE THE LAMP TO DISCOLOR WHEN POWER IS APPLIED. IF LAMP IS INADVERTENTLY HANDLED, CLEAN LAMP WITH ISOPROPYL ALCOHOL (MATERIAL NO. 10-002).
WARNING : FUMES OF ISOPROPYL ALCOHOL (MATERIAL NO. 10-002) ARE TOXIC AND FLAMMABLE. USE IN VENTILATED AREA AWAY FROM FLAMES.
(2)Remove navigation quartz (high intensity) lamp(s) as follows:
(a)Wrap a clean, soft lint-free cloth around lamp (3) and remove lamp from lampholders (4).
NOTE : Do not remove springs from lampholders unless replacement is necessary.

C. Removal of Strobe Light High Intensity Lamp
(1)Remove screws (1) and lens (2) from light assembly (6).
(2)Remove screws (10) and frame (9) together with glass lens (8) from strobe light assembly (5).
WARNING : HIGH VOLTAGE ELECTRIC CURRENT IS STORED IN CAPACITOR WITHIN STROBE LIGHT ASSEMBLY. WAIT 10 MINUTES AFTER POWER HAS BEEN REMOVED BEFORE DISCONNECTING STROBE LAMP FROM LIGHT ASSEMBLY.
CAUTION : DO NOT ALLOW BARE FINGERS TO TOUCH STROBE LAMP. MOISTURE FROM THE SKIN MAY CAUSE THE STROBE LAMP TO DISCOLOR WHEN CURRENT IS APPLIED.
(3)Unscrew strobe lamp (7).
(4)Wrap a clean, soft lint-free cloth around strobe lamp (7) and pull it from lampholder.

D. Installation of High Intensity Quartz Navigation Lamp(s)
CAUTION : DO NOT TOUCH LAMP WITH BARE FINGERS. MOISTURE FROM THE SKIN MAY CAUSE THE LAMP TO DISCOLOR WHEN CURRENT IS APPLIED. IF LAMP IS INADVERTENTLY HANDLED, CLEAN LAMP WITH ISOPROPYL ALCOHOL (MATERIAL NO. 10-002).
WARNING : FUMES OF ISOPROPYL ALCOHOL (MATERIAL NO. 10-002) ARE TOXIC AND FLAMMABLE. USE IN VENTILATED AREA AWAY FROM FLAMES.
(1)Wrap a clean, soft lint-free cloth around lamp (3) and grasp with fingers. Insert lamp into lampholders (4).
(3)Using clean, soft lint-free cloth clean lens assembly (2).
(4)Install lens assembly (2). Install screws (1).

E. Installation of Strobe Light High Intensity Lamp
CAUTION : DO NOT ALLOW BARE FINGERS TO TOUCH STROBE LAMP. MOISTURE FROM THE SKIN MAY CAUSE THE STROBE LAMP TO DISCOLOR WHEN CURRENT IS APPLIED.
(1)Wrap a clean, soft lint-free cloth around strobe lamp (7) and grasp with

fingers. Insert strobe lamp (7) into lampholder and fasten with screws.
(2)Using clean, soft lint-free cloth clean glass lens (8).
(3)Install frame (9) together with glass lens (8) on strobe light assembly (5) and secure with screws (10).
(4)Using a clean, soft lint-free cloth clean lens (2).
(5)Install lens (2) and secure with screws (1).
(6)Remove safety clips and tags and close cirucit breakers 1LA, 11LA and 11LV.

F. Tests

R **ON A/C 001-100,

(2)Position access platform at rear of wing tip (zone 531/631).

B. Removal of High Intensity Quartz Navigation Lamp(s)
(1)Remove screws (5) and lens (6) from light assembly (2).
CAUTION : DO NOT TOUCH LAMP WITH BARE FINGERS. MOISTURE FROM THE SKIN MAY CAUSE THE LAMP TO DISCOLOR WHEN CURRENT IS APPLIED. IF LAMP IS INADVERTENTLY HANDLED, CLEAN LAMP WITH ISOPROPYL ALCOHOL (MATERIAL NO. 10-002).
WARNING : FUMES OF ISOPROPYL ALCOHOL (MATERIAL NO. 10-002) ARE TOXIC AND FLAMMABLE. USE IN VENTILATED AREA AWAY FROM FLAMES.
(2)Wrap a clean, soft, lint-free cloth around quartz (high intensity) lamp(s) (4) and pull lamp from holder (3).
NOTE : Do not remove springs from lampholders unless replacement is necessary.

C. Removal of Strobe Light High Intensity Lamp
(1)Remove screws (5) and lens (6) from light assembly (2).
(2)Unscrew screws (8) and remove lamp unit (10) from strobe light (1).
WARNING : HIGH VOLTAGE ELECTRIC CURRENT IS STORED IN CAPACITOR WITHIN STROBE LIGHT ASSEMBLY. WAIT 10 MINUTES AFTER POWER HAS BEEN REMOVED BEFORE DISCONNECTING STROBE LAMP FROM LIGHT ASSEMBLY.
NOTE : Screws (8) have a retaining device and cannot normally be separated from lamp unit (10).
(3)Slacken screws (9) and remove spring contact (12).
CAUTION : DO NOT TOUCH LAMP WITH BARE FINGERS. MOISTURE FROM THE SKIN MAY CAUSE THE LAMP TO DISCOLOR WHEN POWER IS APPLIED. IF LAMP IS INADVERTENTLY HANDLED, CLEAN LAMP WITH ISPORPYL ALCOHOL (MATERIAL NO. 10-002).
WARNING : FUMES OF ISOPROPYL ALCOHOL (MATERIAL NO. 10-002) ARE TOXIC AND FLAMMABLE. USE IN VENTILATED AREA AWAY FROM FLAMES.
(4)Hold strobe lamp (11) by its end cap and gently pull lamp (11) from lamp unit (10).

D. Preparation of Replacement Component
(1)Using a soft, clean, lint-free cloth, clean lamp(s) with isopropyl alcohol (Material No. 10-002).

WARNING : FUMES OF ISOPROPYL ALCOHOL (MATERIAL NO. 10-002) ARE TOXIC AND FLAMMABLE. USE IN VENTILATED AREA AWAY FROM FLAMES.

E. Installation of High Intensity Navigation Lamp(s)

CAUTION : DO NOT TOUCH LAMP WITH BARE FINGERS. MOISTURE FROM THE SKIN MAY CAUSE THE LAMP TO DISCOLOR WHEN CURRENT IS APPLIED. IF LAMP IS INADVERTENTLY HANDLED, CLEAN LAMP WITH ISOPROPYL ALCOHOL (MATERIAL NO. 10-002).

WARNING : FUMES OF ISORPOPYL ALCOHOL (MATERIAL NO. 10-002) ARE TOXIC AND FLAMMABLE. USE IN VENTILATED AREA AWAY FROM FLAMES.

(1)Wrap a clean, soft, lint-free cloth around quartz navigation lamp (4) and insert lamp (4) into lampholder (3).
(2)Using clean, soft, lint-free cloth, clean lens unit (6).
(3)Position lens (6) over light assembly (2).
(4)Install and secure screws (5).

F. Installation of Strobe Lamp

CAUTION : DO NOT TOUCH LAMP WITH BARE FINGERS. MOISTURE FROM THE SKIN MAY CAUSE THE LAMP TO DISCOLOR WHEN CURRENT IS APPLIED. IF LAMP IS INADVERTENTLY HANDLED, CLEAN LAMP WITH ISOPROPYL ALCOHOL (MATERIAL NO. 10-002).

WARNING : FUMES OF ISOPROPYL ALCOHOL (MATERIAL NO. 10-002) ARE TOXIC AND FLAMMABLE. USE IN VENTILATED AREA AWAY FROM FLAME.

(1)Hold strobe lamp (11) end cap (flanged end) and insert lamp (11) into lamp unit (10).
(2)Position spring contact (12) and tighten screws (9).
(3)Position lamp unit (10) at strobe light (1) and secure with screws (8).
(4)Using a clean, soft, lint-free cloth, clean lens (6) and lens glass on lamp unit (10).
(5)Position lens (6) over light assembly (2).
(6)Install and secure with screws (5).

G. Test

R **ON A/C ALL

(1)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(2)Make certain that electronics racks ventilation is correct.
(3)Remove safety clips and tags and close the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
132VU	LIGHTING/EXT LT/NAV/2	1LA	322/N75
132VU	LIGHTING/EXT LT/NAV/1	11LA	322/N78
132VU	LIGHTING/EXT LT/STROBE	11LV	322/N79

R **ON A/C 001-100,

(4)Carry-out a functional check of strobe and navigation lights at AFT wing

tip (zone 531/631).

WARNING : EYE EXPOSURE TO INTERMITTENT LIGHT FLASHES CAN BE OBJECTIONABLE TO TESTING PERSONNEL. TAKE APPROPRIATE PRECAUTIONS.

ACTION	RESULT
1. On EXT LT Panel 426VU - Place NAV and Logo switch 2LA in position 1.	At AFT wing tip (zone 531/631) - One navigation light is ON.
2. On EXT LT Panel 426VU - Place NAV and Logo switch 2LA in position 2.	At AFT wing tip (zone 531/631) - First navigation light goes OFF and atternate navigation light is ON.
3. On EXT LT Panel 426VU - Place NAV and Logo switch 2LA in position OFF.	At AFT wing tip (zone 531/631) - Both navigation lights are OFF.
4. On EXT LT Panel 426VU - Place STROBE switch 2LV in position ON.	At AFT wing tip (zone 531/631) - Strobelight flashes.
5. On EXT LT Panel 426VU - Place STROBE switch 2LV in position OFF.	At AFT wing tip (zone 531/631) - Strobe light goes OFF.

H. Close-Up

(1)De-energize the aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).

(2)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.

(3)Remove access platform.

R **ON A/C 101-200,

(4)Carry-out a functional check of strobe and navigation lights at AFT wing tip (zone 531/631).

WARNING : EYE EXPOSURE TO INTERMITTENT LIGHT FLASHES CAN BE OBJECTIONABLE TO TESTING PERSONNEL. TAKE APPROPRIATE PRECAUTIONS.

ACTION	RESULT
1. On EXT LT Panel 426VU - Place NAV1/2 switch 2LA in position NAV1.	At wing tip (zone 531/631) - One navigation quartz lamp comes on in light unit 8LA (9LA).
2. On EXT LT Panel 426VU - Place NAV1/2 switch 2LA in position NAV2.	At wing tip (zone 531/631) - One navigation quartz lamp goes off and the alternate lamp in light unit 8LA (9LA) comes on.

ACTION	RESULT
3. On EXT LT Panel 426VU - Place NAV1/2 switch 2LA in position OFF.	At wing tip (zone 531/631) - Both navigation quartz lamps in light unit 8LA (9LA) are off.
4. On EXT LT Panel 426VU - Place switch 2LV to position STROBE ON.	At wing tip (zone 531/631) - Strobe light high intensity lamp in light unit 8LA (9LA) flashes at a frequency of 60 flashes per minute.
5. On EXT LT Panel 426VU - Place switch 2LV to position OFF.	At wing tip (zone 531/631) - Strobe light high intensity lamp in light unit 8LA (9LA) goes off.

G. Close-Up
(1) De-energize the aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).
(2) Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(3) Remove access platform.

AFT NAVIGATION AND STROBE LIGHT ASSEMBLY - REMOVAL/INSTALLATION

WARNING : BEFORE PROCEEDING WITH MAINTENANCE WORK ON OR NEAR MECHANICAL FLIGHT CONTROLS OR PRIMARY FLIGHT CONTROL SURFACES, LANDING GEARS, ASSOCIATED DOORS OR ANY MOVING COMPONENT, MAKE CERTAIN THAT GROUND SAFETIES AND/OR WARNING NOTICES ARE IN CORRECT POSITION TO PREVENT INADVERTENT OPERATION OF CONTROLS.
BEFORE POWER IS SUPPLIED TO THE AIRCRAFT, MAKE CERTAIN THAT ELECTRICAL CIRCUITS UPON WHICH WORK IS IN PROGRESS ARE ISOLATED.

1. Reason for the Job

A. Removal of Navigation Light Assembly 8LA (9LA) for replacement.

B. Removal of Navigation Light Assembly 8LA (9LA) during replacement of wing tip (Ref. 57-30-11, P. Block 401).

C. Removal of Navigation Light Assembly 8LA (9LA) for access to flashtube assembly (Ref. 33-41-31, P. Block 301).

D. Separation of Strobe Light Unit from Navigation Light Assembly.

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 6 m (19 ft. 8 in.)
B.	Circuit Breaker Safety Clips and Tags
C.	Protective Cap/Plug
D.	Soft, Lint-Free Cloth

Referenced Procedures

- 24-41-00, P. Block 301	AC External Power Control
- 33-41-31, P. Block 301	AFT Navigation and Strobe Light Assembly
- 57-30-11, P. Block 401	Wing Tip

3. Procedure

A. Job Set-Up
(1)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
132VU	LIGHTING/EXT LT/NAV/2	1LA	322/N75
132VU	LIGHTING/EXT LT/NAV/1	11LA	322/N78
132VU	LIGHTING/EXT LT/STROBE	11LV	322/N79

(2)Position access platform at rear of wing tip (zone 531/631).

B. Removal

R **ON A/C 101-200,

(Ref. Fig. 401)

R **ON A/C 001-100,

(Ref. Fig. 402)

R **ON A/C 101-200,

(1)Remove bolts (1).
WARNING : HIGH VOLTAGE ELECTRIC CURRENT IS STORED IN CAPACITOR WITHIN STROBELIGHT ASSEMBLY. WAIT 10 MINUTES AFTER POWER HAS BEEN REMOVED BEFORE DISCONNECTING STROBELIGHT ASSEMBLY FROM LIGHT ASSEMBLY (REF. 33-41-31, P. BLOCK 301).
(2)Withdraw light assembly 8LA (9LA) sufficiently then disconnect electrical connector (2) from light unit.
(3)Remove light assembly from wing tip, approximate weight 4 kg (8.5 lb.).
(4)Install protective cap/plug on electrical connections.

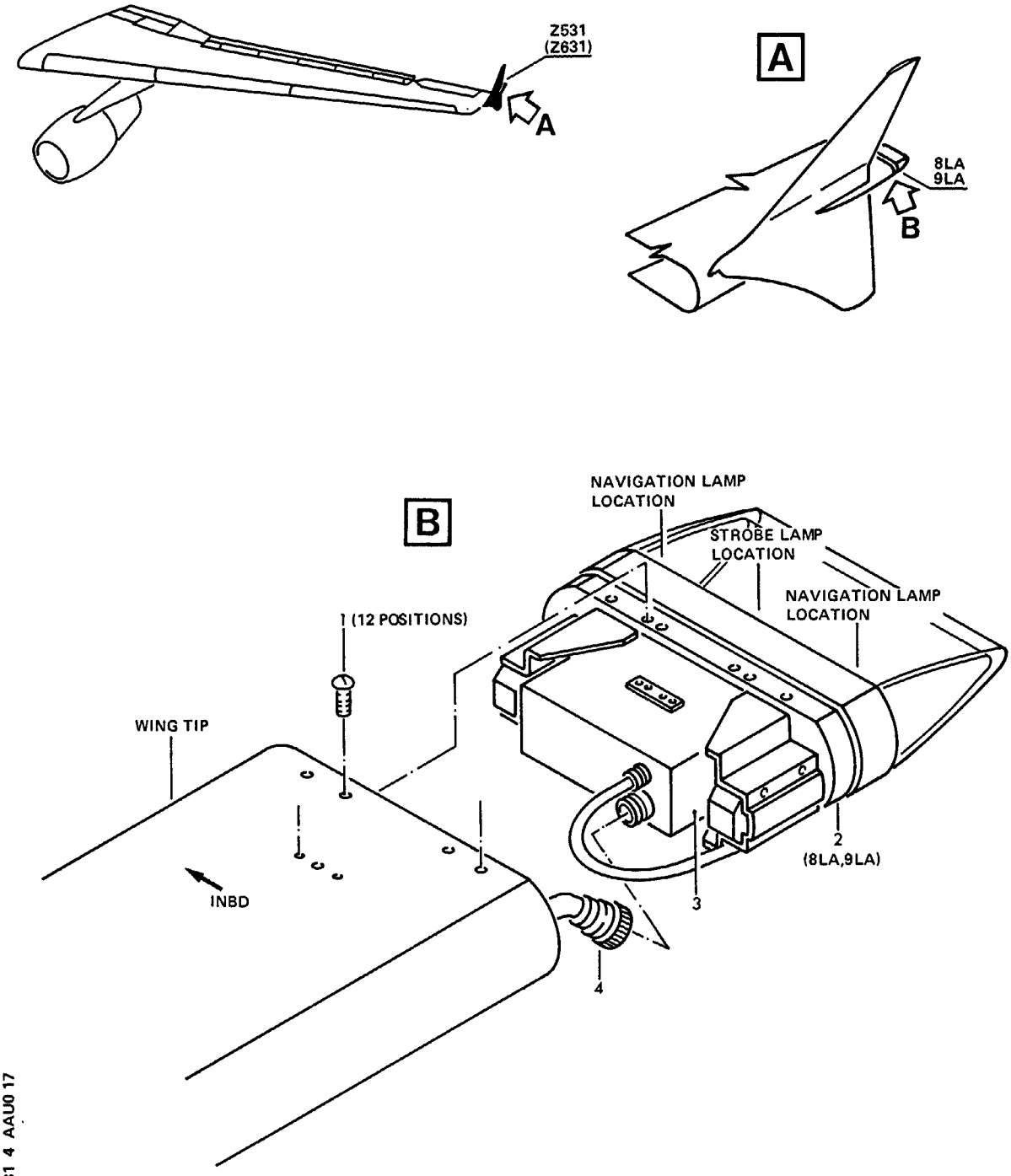
C. Preparation of Replacement Component
(1)Not applicable. It is assumed that high and low intensity lamps and strobe lamp are installed in the light assembly.

R **ON A/C 001-100,

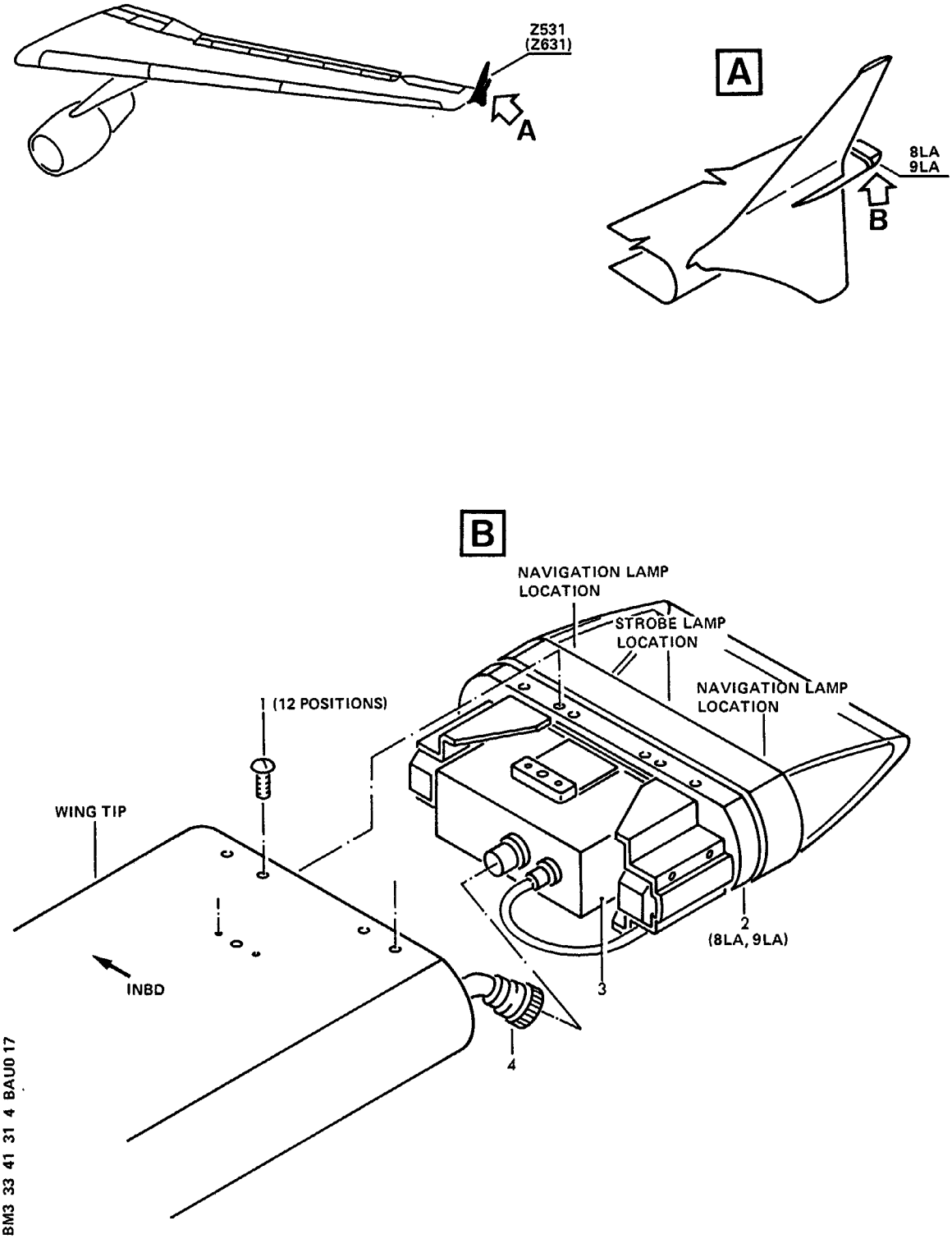
(1)Remove screws (1).
(2)Withdraw navigation light assembly (2) sufficiently to disconnect electrical connector (4) from Strobe Light Unit.
(3)Remove navigation light assembly (2) from wing tip (approximate weight 4 kg (8.5 lb.)).
(4)Install protective cap/plug on electrical connections.

C. Removal of Strobe Light Unit from Navigation Light Assembly
(Ref. Fig. 403)
(1)Disconnect electrical connector (13) and install protective cap/plug on electrical connections.
(2)Remove screws (12) and withdraw Strobe Light unit (3) from Navigation Light assembly (2).
WARNING : HIGH VOLTAGE ELECTRIC CURRENT IS STORED IN CAPACITOR WITHIN STROBE LIGHT UNIT. WAIT 10 MINUTES AFTER POWER HAS BEEN REMOVED BEFORE DISCONNECTING STROBE LIGHT UNIT FROM NAVIGATION LIGHT ASSEMBLY (REF. 33-41-31, P. BLOCK 301).
(3)When the strobe light unit (3) has been removed for replacement, separate it from its two mounting brackets (11) by removing screws (10).

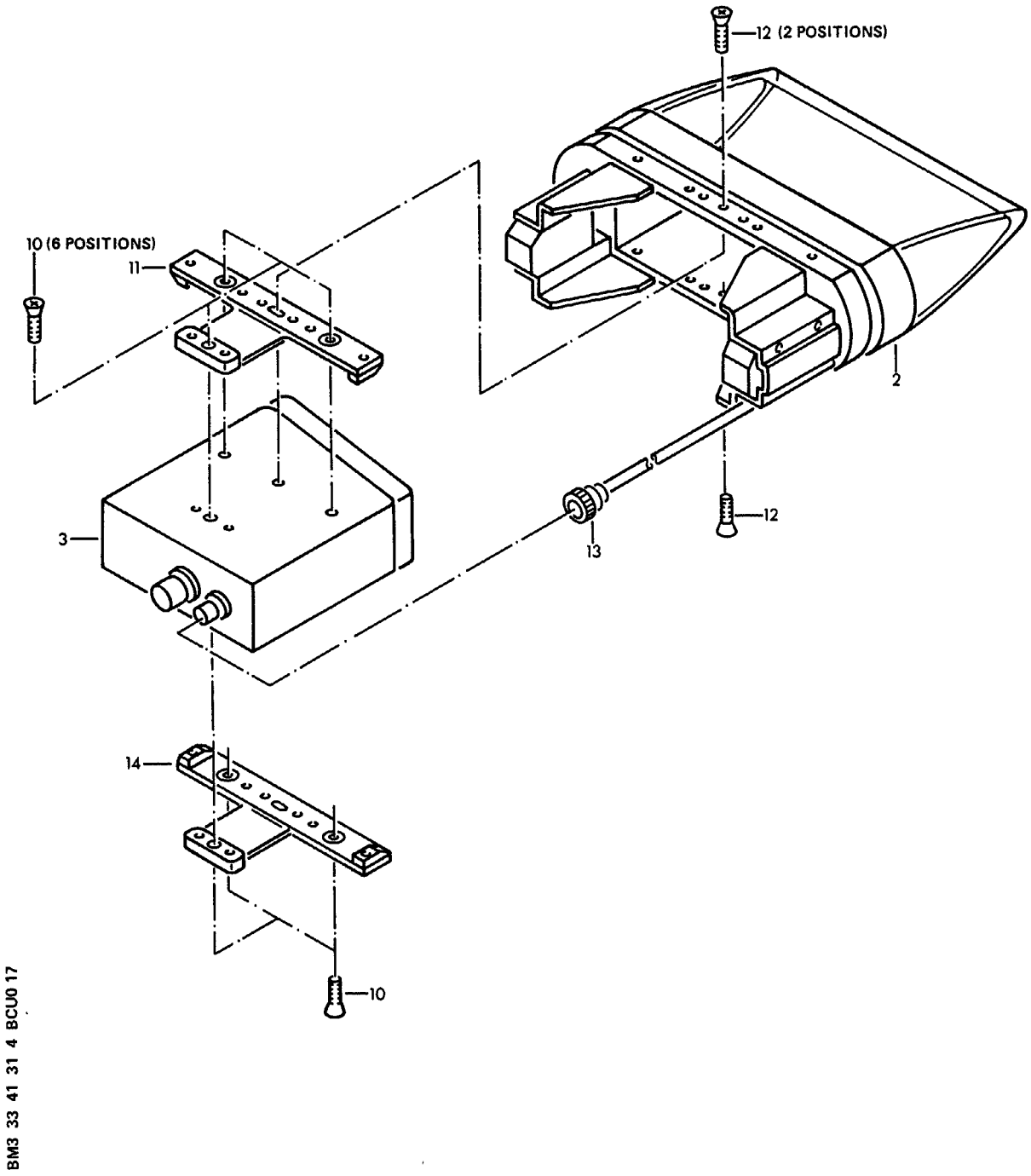
D. Preparation of Replacement Component (Ref. Fig. 403)
(1)When the strobe light unit is removed for replacement, proceed as follows:



Light Assembly 8LA and 9LA
Figure 401



Light Assembly 8LA and 9LA
Figure 402



Removal of Strobe Light Unit and Mounting Bracket
Figure 403

(a)Attach mounting brackets (11),(14) to strobe light Unit (3) with screws (10).

(2)When the strobe light unit is separated from navigation light assembly, proceed as follows:

(a)Position strobe light assembly (3) in navigation light assembly (2) and secure with screws (12).

(b)Remove cap and plug from electrical connections and connect electrical connector (13) to strobe light unit (3).

R **ON A/C 101-200,

D. Installation (Ref. Fig. 401)

R **ON A/C 001-100,

E. Installation (Ref. Fig. 402)

R **ON A/C 101-200,

(1)Remove protective cap/plug from electrical connections.
(2)Connect electrical connector (2) to light assembly.
(3)Insert light assembly in wing tip.
(4)Install and tighten bolts (1).
(5)Using clean soft lint-free cloth, clean exterior of lens.
(6)Remove safety clips and tags and close circuit breakers 1LA, 11LA and 11LV.

E. Test

(1)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(2)Make certain that electronics racks ventilation is correct.
(3)Perform an operational test on aft navigation and strobe light assembly 8LA (9LA):

WARNING : EYE EXPOSURE TO INTERMITTENT LIGHT FLASHES CAN BE OBJECTIONABLE TO TESTING PERSONNEL. TAKE APPROPRIATE PRECAUTIONS.

ACTION	RESULT
1. On EXT LT Panel 426VU R - Place NAV and Logo switch 2LA in postion 1.	At wing tip (zone 531/631) - One navigation quartz lamp comes on in light unit 8LA (9LA).
2. On EXT LT Panel 426VU R - Place NAV and Logo switch 2LA in position 2.	At wing tip (zone 531/631) - One navigation quartz lamp goes off and the alternate lamp in light unit 8LA (9LA) comes on.
3. On EXT LT Panel 426VU R - Place NAV and Logo switch 2LA in position OFF.	At wing tip (zone 531/631) - Both navigation quartz lamps in light unit 8LA (9LA) go off.

ACTION	RESULT
4. On EXt LT Panel 426VU - Place STROBE switch 2LV in position STROBE ON.	At wing tip (zone 531/631) - Strobe light high intensity lamp in light unit 8LA (9LA) flashes at a frequency of 60 flashes per minute.
5. On EXT LT Panel 426VU - Place STROBE switch 2LV in position OFF.	At wing tip (zone 531/631) - Strobe light high intensity lamp in light unit 8LA (9LA) goes off.

F. Close-Up
(1)De-energize the aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).
(2)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(3)Remove access platform.

R **ON A/C 001-100,

(1)Remove protective cap/plug from electrical connections.
(2)Connect electrical connector (4) to navigation light assembly (2).
(3)Insert navigation light assembly (2) in wing tip.
(4)Install and tighten screws (1).
(5)Using clean soft lint-free cloth, clean exterior of lens.

F. Test
(1)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(2)Make certain that electronics racks ventilation is correct.
(3)Remove safety clips and tags and close the following circuit breakers: 1LA, 11LA and 11LV.
(4)Perform an operational test of aft navigation and strobe light assembly 8LA (9LA):
WARNING : EYE EXPOSURE TO INTERMITTENT LIGHT FLASHES CAN BE OBJECTIONABLE TO TESTING PERSONNEL. TAKE APPROPRIATE PRECAUTIONS.

ACTION	RESULT
(a)On EXT LT Panel 426VU - Place NAV and Logo switch 2LA in position 1.	At wing tip zone 531 (631) - One navigation quartz lamp comes on in navigation light assembly (2) 8LA (9LA).
(b)On EXT LT Panel 426VU - Place NAV and Logo switch 2LA in position 2.	At wing tip zone 531 (631) - One navigation quartz lamp goes off and the alternate lamp in navigation light assembly (2) 8LA (9LA) comes on.
(c)On EXT LT Panel 426VU	At wing tip zone 531 (631)

ACTION	RESULT
- Place NAV and Logo switch 2LA to OFF position.	- Both navigation quartz lamps in navigation light assembly (2) 8LA (9LA) are off.
(d)On EXT LT Panel 426VU - Place STROBE switch 2LV to ON position.	At wing tip zone 531 (631) - Strobe light unit (3) high intensity lamp in navigation light assembly (2) 8LA (9LA) flashes at a frequency of 60 flashes per minute.
(e)On EXT LT Panel 426VU - Place STROBE switch 2LV to OFF position.	At wing tip zone 531 (631) - Strobe light unit (3) high intensity lamp in navigation light assembly (2) 8LA (9LA) goes off.

G. Close-Up
(1)De-energize the aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).
(2)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(3)Remove access platform.

FORWARD NAVIGATION LIGHT - SERVICING

WARNING : BEFORE PROCEEDING WITH MAINTENANCE WORK ON OR NEAR MECHANICAL FLIGHT CONTROLS OR PRIMARY FLIGHT CONTROL SURFACES, LANDING GEARS, ASSOCIATED DOORS OR ANY MOVING COMPONENTS, MAKE CERTAIN THAT GROUND SAFETIES AND/OR WARNING NOTICES ARE IN CORRECT POSITION TO PREVENT INADVERTENT OPERATION OF CONTROLS.

WARNING : BEFORE POWER IS SUPPLIED TO THE AIRCRAFT MAKE CERTAIN THAT ELECTRICAL CIRCUITS UPON WHICH WORK IS IN PROGRESS ARE ISOLATED.

1. Reasons for the Job

A. Replacement of defective lamp(s).

B. Removal of lamp(s) during trouble shooting checks.

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 6 m (19 ft. 8 in.)
B.	Circuit Breaker Safety Clips and Tags
C.	Soft Lint-Free Cloth
D. Material No. 10-002	Anti-Icing and De-Icing Materials (Ref. 20-31-00)
Referenced Procedure	
- 24-41-00, P. Block 301	AC External Power Control

3. Procedure

(Ref. Fig. 301)

A. Job Set-Up

(1)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
132VU	LIGHTING/EXT LT/NAV/2	1LA	322/N75
132VU	LIGHTING/EXT LT/NAV/1	11LA	322/N78

(2)Position access platform at forward section of wing tip zone 531 (631).

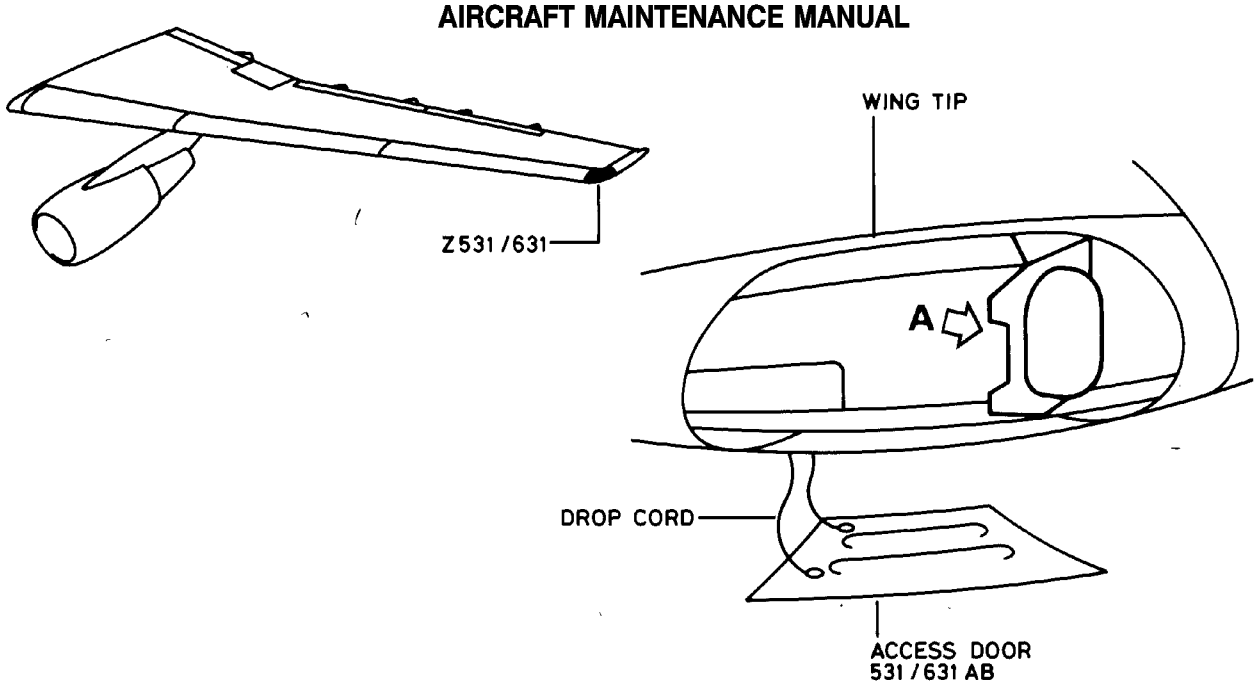
(3)Open access door 531AB (631AB).

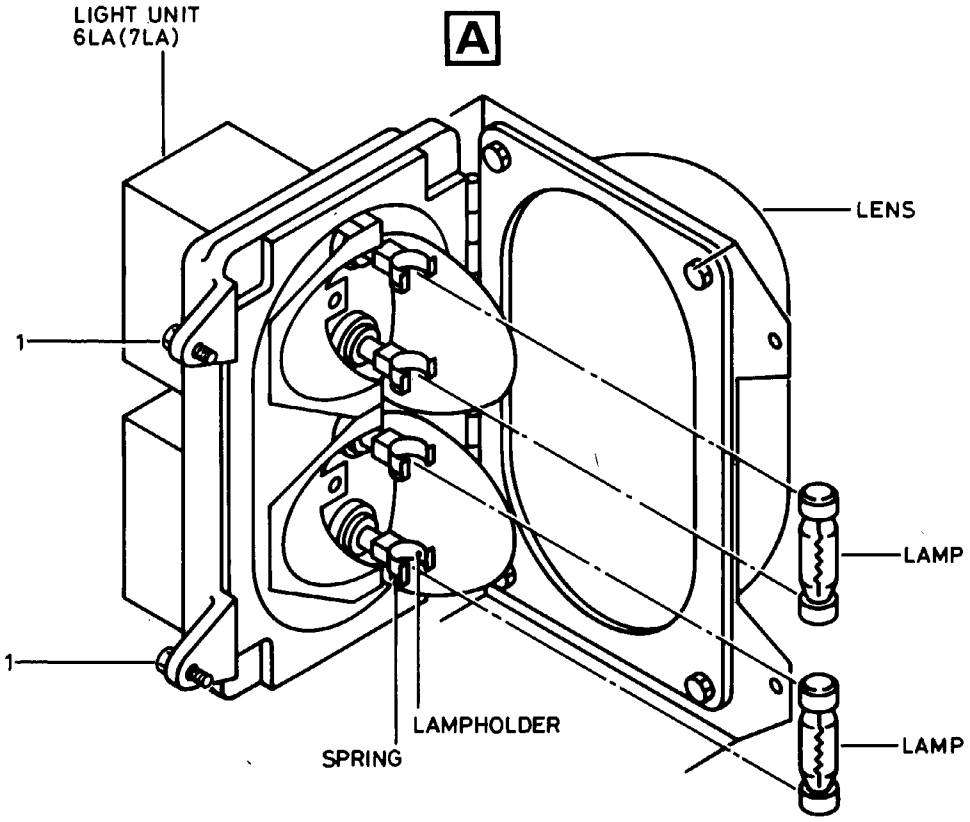
B. Removal

(1)Unscrew captive screws (1) and hinge open light unit 6LA (7LA).

CAUTION : DO NOT TOUCH LAMP WITH FINGERS. AS OILS FROM THE SKIN MAY CAUSE THE LAMP TO DISCOLOR WHEN POWER IS APPLIED. IF THE LAMP IS INADVERTENTLY HANDLED, CLEAN LAMP WITH CLEANING AGENT (MATERIAL NO. 10-002 Isopropyl Alcohol).

WARNING : CLEANING AGENT FUMES ARE TOXIC AND FLAMMABLE. USE IN VENTILATED AREA AWAY FROM FLAME.





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FWD Wing Tip Navigation Lamps
Figure 301

(2)Wrap a clean, soft lint-free cloth around lamp(s) and remove from lamp holder(s).
NOTE : Do not remove springs from lamp holders unless replacement required.

C. Installation
CAUTION : DO NOT TOUCH LAMP WITH FINGERS. OILS FROM THE SKIN MAY CAUSE THE LAMP TO DISCOLOR WHEN CURRENT IS APPLIED. IF LAMP IS INADVERTENTLY HANDLED, CLEAN LAMP WITH CLEANING AGENT (MATERIAL NO. 10-002 Isopropyl Alcohol).
WARNING : CLEANING AGENT FUMES ARE TOXIC AND FLAMMABLE. USE IN VENTILATED AREA AWAY FROM FLAME.
(1)Wrap a clean, soft lint-free cloth around lamp(s) and insert into lamp holder(s).
(2)Using a clean, soft lint-free cloth, clean the lens of light unit 6LA (7LA).
(3)Close light and secure by tightening captive screws (1).

D. Test
(1)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(2)Remove safety clips and tags and close the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
132VU	LIGHTING/EXT LT/NAV/2	1LA	322/N75
132VU	LIGHTING/EXT LT/NAV/1	11LA	322/N78

	ACTION	RESULT
	1. On EXT LT panel 426VU	At wing tip (zone 531/631)
R	- place NAV and LOGO switch 2LA in position 1	- one navigation quartz (high intensity) lamp comes on in light unit 6LA (7LA)
	2. On EXT LT panel 426VU	At wing tip (zone 531/631)
R	- place NAV and LOGO switch 2LA in position 2	- one navigation quartz (high intensity) lamp in light unit 6LA (7LA) goes off and the alternate lamp comes on.
	3. On EXT LT panel 426VU	At wing tip (zone 531/631)
R	- place NAV and LOGO switch 2LA in position OFF	- both navigation (high intensity) lamps unit 6LA (7LA) are off.

E. Close-Up
(1)De-energize the aircraft electrical network and disconnect electrical

ground power unit (Ref. 24-41-00, P. Block 301).
(2)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(3)Close access door 531AB (631AB).
(4)Remove access platform.

FORWARD NAVIGATION LIGHT - REMOVAL/INSTALLATION

WARNING : BEFORE PROCEEDING WITH MAINTENANCE WORK ON OR NEAR MECHANICAL CONTROLS OR PRIMARY FLIGHT CONTROL SURFACES, LANDING GEAR ASSOCIATED DOORS OR ANY MOVING COMPONENTS, MAKE CERTAIN THAT GROUND SAFETIES AND/OR WARNING NOTICES ARE IN CORRECT POSITION TO PREVENT INADVERTENT OPERATION OF CONTROLS.

WARNING : BEFORE POWER IS APPLIED TO THE AIRCRAFT MAKE CERTAIN THAT ELECTRICAL CIRCUITS UPON WHICH WORK IS IN PROGRESS.

1. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 6 m (19 ft. 8 in.)
B.	Circuit Breaker Safety Clips and Tags
C.	Soft, Lint-Free Cloth

Referenced Procedures

- 20-28-11, P. Block 1	Electrical Bonding
- 24-41-00, P. Block 301	AC External Power Control

2. Procedure

(Ref. Fig. 401)

A. Job Set-Up

(1)Open, safety and tag the following circuit breaker(s):

PANEL	SERVICE	IDENT.	LOCATION
132VU	LIGHTING/EXT LT/NAV/2	1LA	322/N75
132VU	LIGHTING/EXT LT/NAV/1	11LA	322/N78

(2)Position access platform at forward section of wing tip zone 531 (631).

(3)Open access door 531AB (631AB).

B. Removal

(1)Disconnect aircraft electrical wiring from terminal blocks at rear of light unit 6LA (7LA). Insulate and stow disconnected terminals.
NOTE : Record connections to facilitate reconnection.

(2)Remove nut (1), bolt (2) and disconnect bonding lead from structure.

(3)Unscrew captive screws (3) and open light unit.

(4)Support light unit and remove screws (4).

(5)Remove light unit from wing tip.

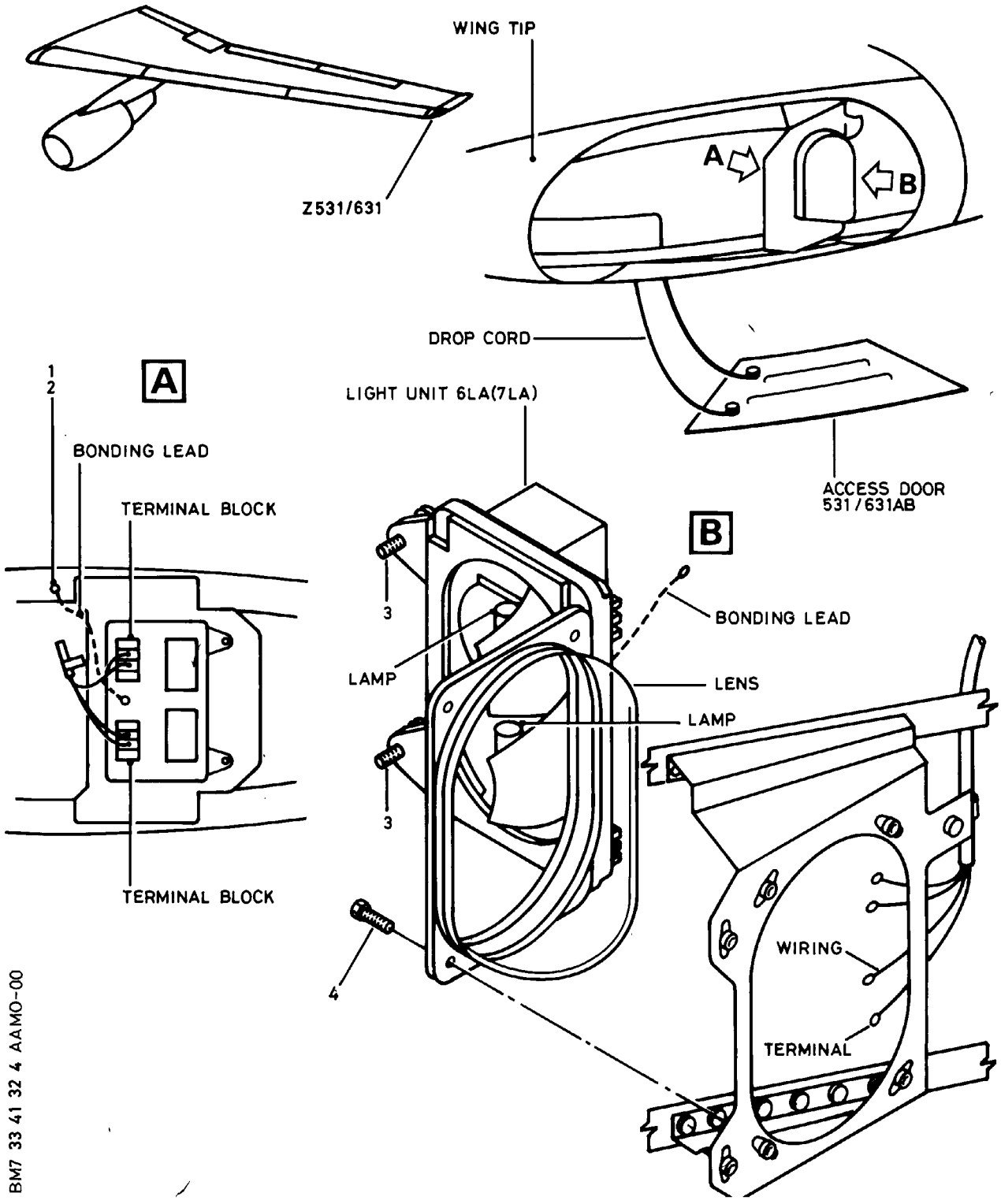
C. Preparation of Replacement Component

(1)Unscrew captive screws (3) and open light unit.

(2)Ensure correct lamps are fitted in light unit.

D. Installation

(1)Using a clean, lint-free cloth, clean the outside of the light unit lens.



FWD Wing Tip Navigation Light
Figure 401

(2)Position light unit 6LA (7LA) in wing-tip.
(3)Install and tighten screws (4).
(4)Using a clean, lint-free cloth, clean the inside of the light unit lens.
(5)Close light unit and secure with captive screws (3).
(6)Unstow aircraft electrical wiring and remove temporary insulation from terminals.
(7)Connect aircraft wiring to terminal blocks at rear of light unit and TORQUE screws to a maximum of 0.113 m.daN (10 lbf. in.).
(8)Connect bonding lead to aircraft structure using bolts (2) and nut (1) (Ref. 20-28-11, P. Block 1).

E. Test
(1)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(2)Remove safety clips and tags and close the following circuit breaker(s):

PANEL	SERVICE	IDENT.	LOCATION
132VU	LIGHTING/EXT LT/NAV/2	1LA	322/N75
132VU	LIGHTING/EXT LT/NAV/1	11LA	322/N78

	ACTION	RESULT
	1. On EXT LT panel 426VU - place NAV and LOGO switch 2LA in position 1.	At wing tip (zone 531/631) - one navigation quartz (high intensity) lamp comes on in light unit 6LA (7LA).
	2. On EXT LT panel 426VU - place NAV and LOGO switch 2LA in position 2.	At wing tip (zone 531/631) - one navigation quartz (high intensity) lamp in light unit 6LA (7LA) goes off and the alternate lamp comes on.
	3. On EXT LT panel 426VU - place NAV and LOGO switch 2LA in position OFF.	At wing tip (zone 531/631) - both navigation (high intensity) lamps unit 6LA (7LA) are off.

F. Close-Up
(1)De-energize the aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).
(2)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(3)Close access door 531AB (631AB).
(4)Remove access platform.

FORWARD STROBE LIGHTS - SERVICING

WARNING : BEFORE PROCEEDING WITH MAINTENANCE WORK ON OR NEAR MECHANICAL FLIGHT CONTROLS OR PRIMARY FLIGHT CONTROL SURFACES, LANDING GEARS, ASSOCIATED DOORS OR ANY MOVING COMPONENT, MAKE CERTAIN THAT GROUND SAFETIES AND/OR WARNING NOTICES ARE IN CORRECT POSITION TO PREVENT INADVERTENT OPERATION OF CONTROLS.

CAUTION : BEFORE POWER IS SUPPLIED TO THE AIRCRAFT, MAKE CERTAIN THAT ELECTRICAL CIRCUITS UPON WHICH WORK IS IN PROGRESS ARE ISOLATED.

1. Reasons for the Job

A. Replacement of defective strobe lamp.

B. Removal of lamp during trouble shooting checks.

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 5.39 m (17.7 ft.)
B.	Circuit Breaker Safety Clips and Tags
C.	Soft, Lint-Free Cloth
D. Material No. 10-002	Anti-Icing and De-Icing Materials (Ref. 20-31-00)

Referenced Procedures

- 24-41-00, P. Block 301	AC External Power Control
- 33-41-33, P. Block 401	Forward Strobe Lights

3. Procedure

R **ON A/C 101-200,

(Ref. Fig. 301)

R **ON A/C 001-100,

(Ref. Fig. 302)

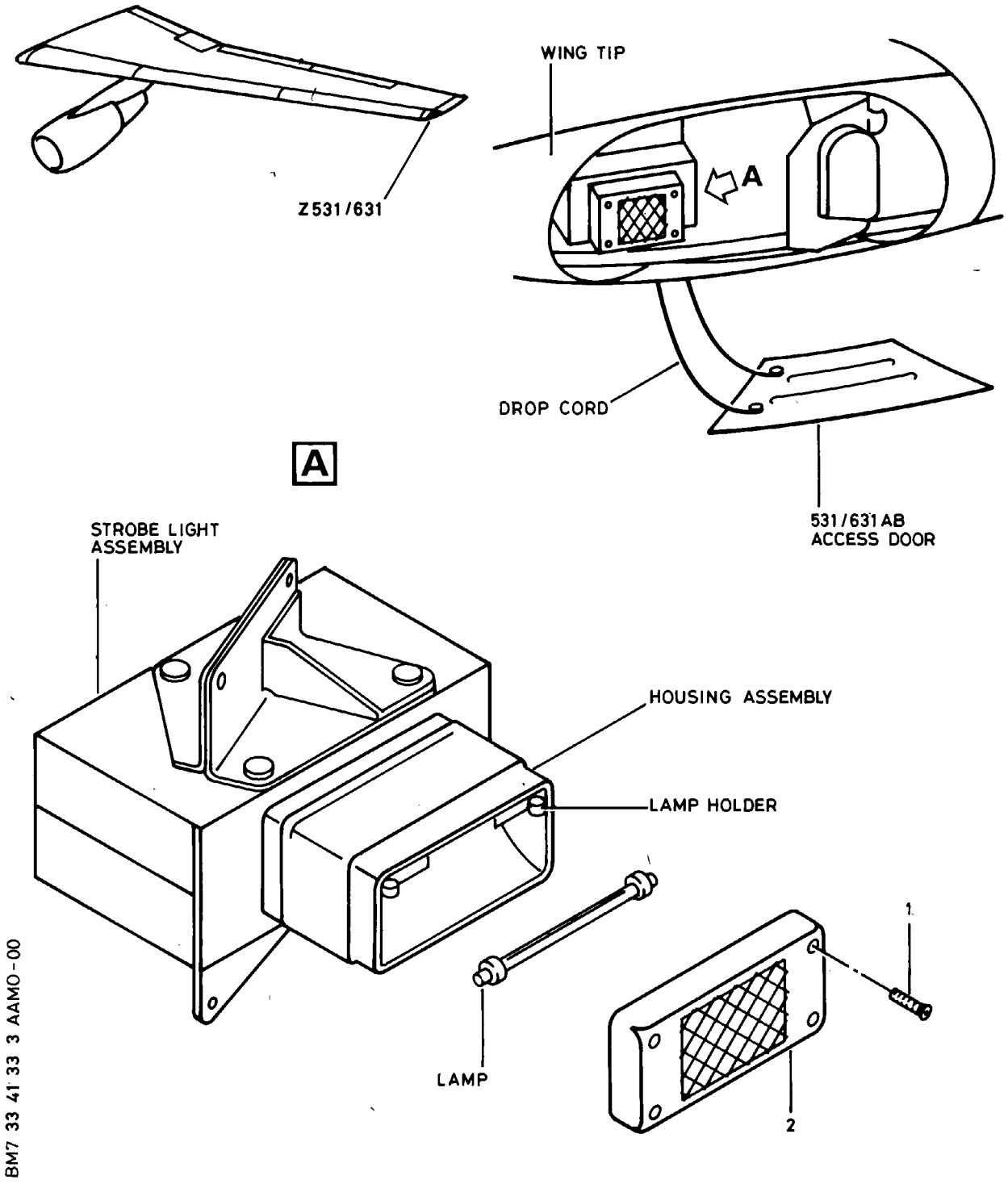
R **ON A/C ALL

A. Job Set-Up

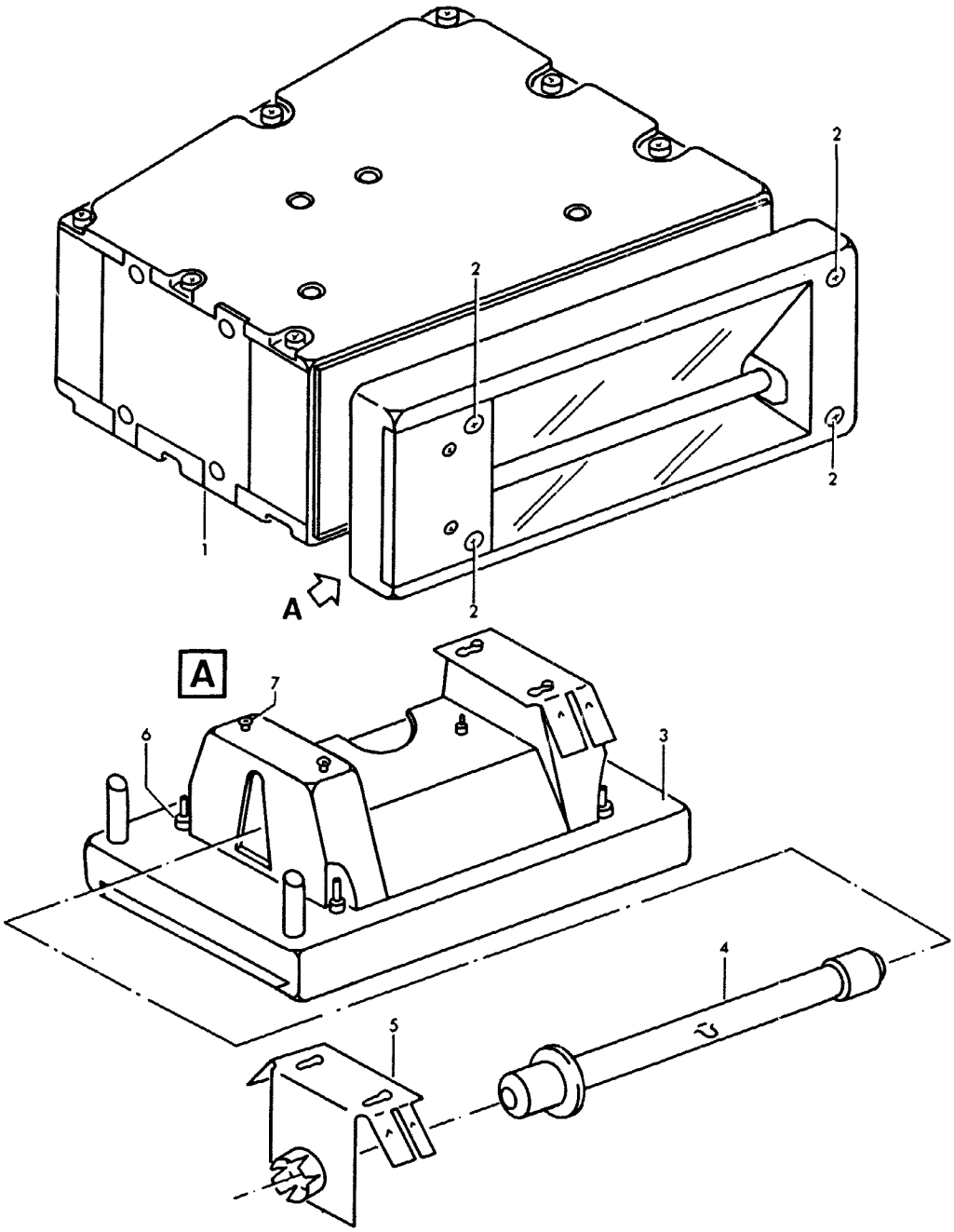
(1)Position access platform at wingtip, zone 531/631.

(2)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
132VU	LIGHTING/EXT LT/NAV/2	1LA	322/N75
132VU	LIGHTING/EXT LT/NAV/1	11LA	322/N78
132VU	LIGHTING/EXT LT/STROBE	11LV	322/N79



Installation of Strobe Lamp
Figure 301



FWD Wingtip Strobe Lights
Figure 302

R **ON A/C 101-200,

(3)Open access door 531/631AB.

B. Removal
(1)Remove light unit 13LV (14LV) from wing tip (Ref. 33-41-33, P. Block 401).
WARNING : HIGH VOLTAGE ELECTRIC CHARGE IS STORED IN CAPACITOR WITHIN STROBELIGHT ASSEMBLY. WAIT 10 MINUTES AFTER POWER HAS BEEN REMOVED BEFORE ATTEMPTING TO REPLACE STROBE LAMP.
(2)Remove screws (1) and pull lens unit (2) from housing assembly.
CAUTION : DO NOT ALLOW FINGERS TO TOUCH STROBE LAMP. OILS FROM THE SKIN MAY CAUSE THE STROBE LAMP TO DISCOLOR WHEN CURRENT IS APPLIED.
(3)Wrap a clean, soft lint-free cloth around lamp and pull from lamp-holders.

C. Installation
CAUTION : DO NOT ALLOW FINGERS TO TOUCH STROBE LAMP. OILS FROM THE SKIN MAY CAUSE THE LAMP TO DISCOLOR WHEN CURRENT IS APPLIED.
(1)Wrap a clean, soft lint-free cloth around strobe lamp and grasp with fingers. Insert lamp into lampholders.
(2)Using clean, soft, lint-free cloth clean strobelight assembly lens (2).
(3)Position lens unit (2) on housing assembly and secure with screws (1).
(4)Install light unit 13LV (14LV) in wing tip (Ref. 33-41-33, P. Block 401).

D. Test
(1)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(2)Remove safety clips and tags and close circuit breakers 1LA, 11LA and 11LV.
(3)Carry out a functional check of strobe light:

ACTION	RESULT
1. On EXT LT panel 426VU - Place STROBE switch 2LV in position STROBE ON.	At Wing Tip (Zone 531/631). - Strobe light high intensity lamp in light unit 13LV (14LV) flashes at a frequency of 60 flashes per minute.
2. On EXT LT Panel 426VU - Place STROBE switch 2LV in position OFF.	At wing Tip (Zone 531/631). - Strobe light high intensity lamp in light unit 13LV (14LV) goes off.

E. Close-Up
(1)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(2)Close acccess door 531/631AB.

(3)Remove access platform.
(4)De-energize the aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).

R **ON A/C 001-100,

(3)Open access door 531/631AB.

B. Removal
(1)Remove light units 24LV/26LV (23LV/29LV) (Ref. 33-41-33, P. Block 401).
WARNING : HIGH VOLTAGE ELECTRIC CHARGE IS STORED IN CAPACITOR WITHIN STROBE LIGHT UNIT. WAIT 10 MINUTES AFTER POWER HAS BEEN REMOVED BEFORE ATTEMPTING TO REPLACE STROBE LAMP.
(2)Unscrew screws (2) and pull lens unit (3) from light unit (1).
NOTE : Screws (2) have a retaining device (6) and cannot normally be separated from lens unit (1).
(3) Slacken screws (7), and remove spring contact (5).
CAUTION : DO NOT ALLOW FINGERS TO TOUCH STROBE LAMP. OILS FROM THE SKIN MAY CAUSE THE STROBE LAMP TO DISCOLOR WHEN POWER IS APPLIED.
(4)Hold strobe lamp (4) by its end cap and gently pull lamp (4) from lens unit (3).

C. Preparation of Replacement Component
(1)Using a clean, soft, lint-free cloth, clean strobe lamp glass with cleaning agent (Material No. 10-002).

D. Installation
CAUTION : DO NOT ALLOW FINGERS TO TOUCH STROBE LAMP. OILS FROM THE SKIN MAY CAUSE THE STROBE LAMP TO DISCOLOR WHEN POWER IS APPLIED.
(1)Hold strobe lamp by its end cap (flanged end) and insert lamp (4) into lens unit (3).
(2)Position spring contact (5) and tighten screws (7).
(3)Position lens unit (3) on light unit (1) and secure with screws (2).
(4)Install light units 24LV/26LV (23LV/29LV) in wing tip (Ref. 33-41-33, P. Block 401).

E. Test
(1)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(2)Remove safety clips and tags and close circuit breakers 1LA, 11LA and 11LV.
(3)Carry-out a functicnal check of strobe lights.

ACTION	RESULT
1. On EXT LT Panel 426VU - Place STROBE switch 2LV in position ON.	At wing tip zone 531 (631). - Strobe lights 24LV/26LV (23LV/29LV) flash.
2. On EXT LT Panel 426VU - Place STROBE switch 2LV in position	At wing tip zone 531 (631). - Strobe lights 24LV/26LV (23LV/29LV)

ACTION	RESULT
OFF.	go off.

F. Close-Up
(1)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(2)Remove access platform.
(3)De-energize the aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).

FORWARD STROBE LIGHTS - REMOVAL/INSTALLATION

WARNING : BEFORE PROCEEDING WITH MAINTENANCE WORK ON OR NEAR MECHANICAL FLIGHT CONTROLS OR PRIMARY FLIGHT CONTROL SURFACES, LANDING GEARS, ASSOCIATED DOORS OR ANY MOVING COMPONENT, MAKE CERTAIN THAT GROUND SAFETIES AND/OR WARNING NOTICES ARE IN CORRECT POSITION TO PREVENT INADVERTENT OPERATION OF CONTROLS.
BEFORE POWER IS SUPPLIED TO THE AIRCRAFT MAKE CERTAIN THAT ELECTRICAL CIRCUITS UPON WHICH WORK IS IN PROGRESS ARE ISOLATED.

1. Reason for the Job

A. Removal of light unit for replacement.

B. Removal of light unit during replacement of wing tip (Ref. 57-30-11, P. Block 401).

C. Removal of light unit for access to strobe lamp assembly.

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 6 m (19 ft. 8 in.)
B.	Circuit Breaker Safety Clips and Tags
C.	Protective Cap/Plug
D.	Soft, Lint-free Cloth

Referenced Procedures

- 24-41-00, P. Block 301	AC External Power Control
- 57-30-11, P. Block 401	Wing Tip

3. Procedure

A. Job Set-Up
(1)Position access platform at forward section of wing tip, zone 531 (631).
(2)Open, safety and tag the following circuit breakers:

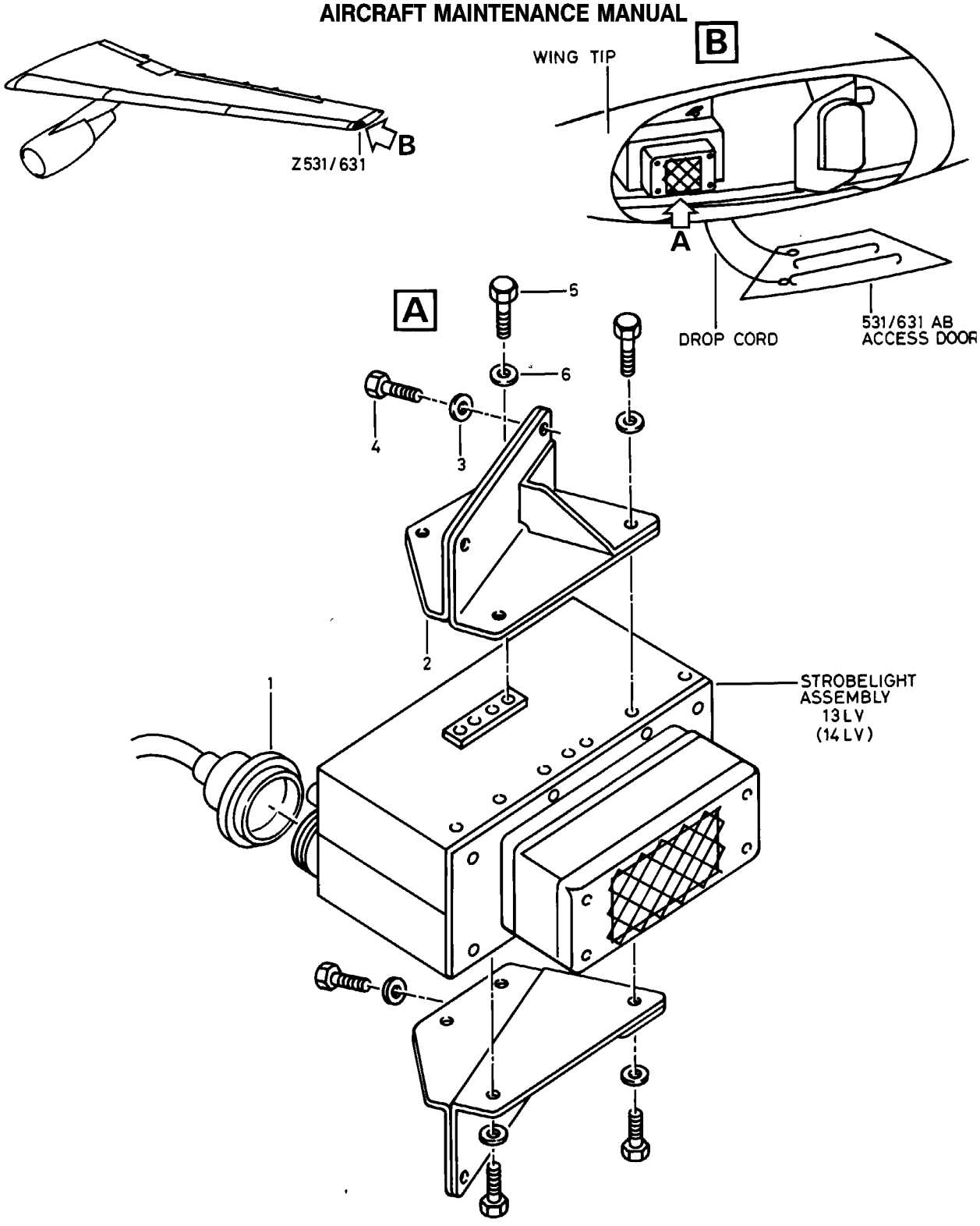
PANEL	SERVICE	IDENT.	LOCATION
132VU	LIGHTING/EXT LT/NAV/2	1LA	322/N75
132VU	LIGHTING/EXT LT/NAV/1	11LA	322/N78
132VU	LIGHTING/EXT LT/STROBE	11LV	322/N79

(3)Open access door 531/631AB.

B. Removal

R **ON A/C 101-200,

(Ref. Fig. 401)



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FWD Wing Tip Strobe Light
Figure 401

R **ON A/C 001-100,

(Ref. Fig. 402)

R **ON A/C 101-200,

(1)Disconnect electrical connector (1) from light unit 13LV (14LV).
(2)Remove bolts (4), washers (3) and withdraw light unit, complete with joint angles (2), from wing tip.
(3)Install protective cap/plug on electrical connections.
(4)Applicable only if light unit is removed for replacement. Remove bolts (5), washers (6), and joint angles (2).

C. Installation (Ref. Fig. 401)
(1)If applicable, position joint angles (2), install and tighten washers (6) with bolts (5).
(2)Position light unit in wing tip. Install and tighten bolts (4) with washers (3).

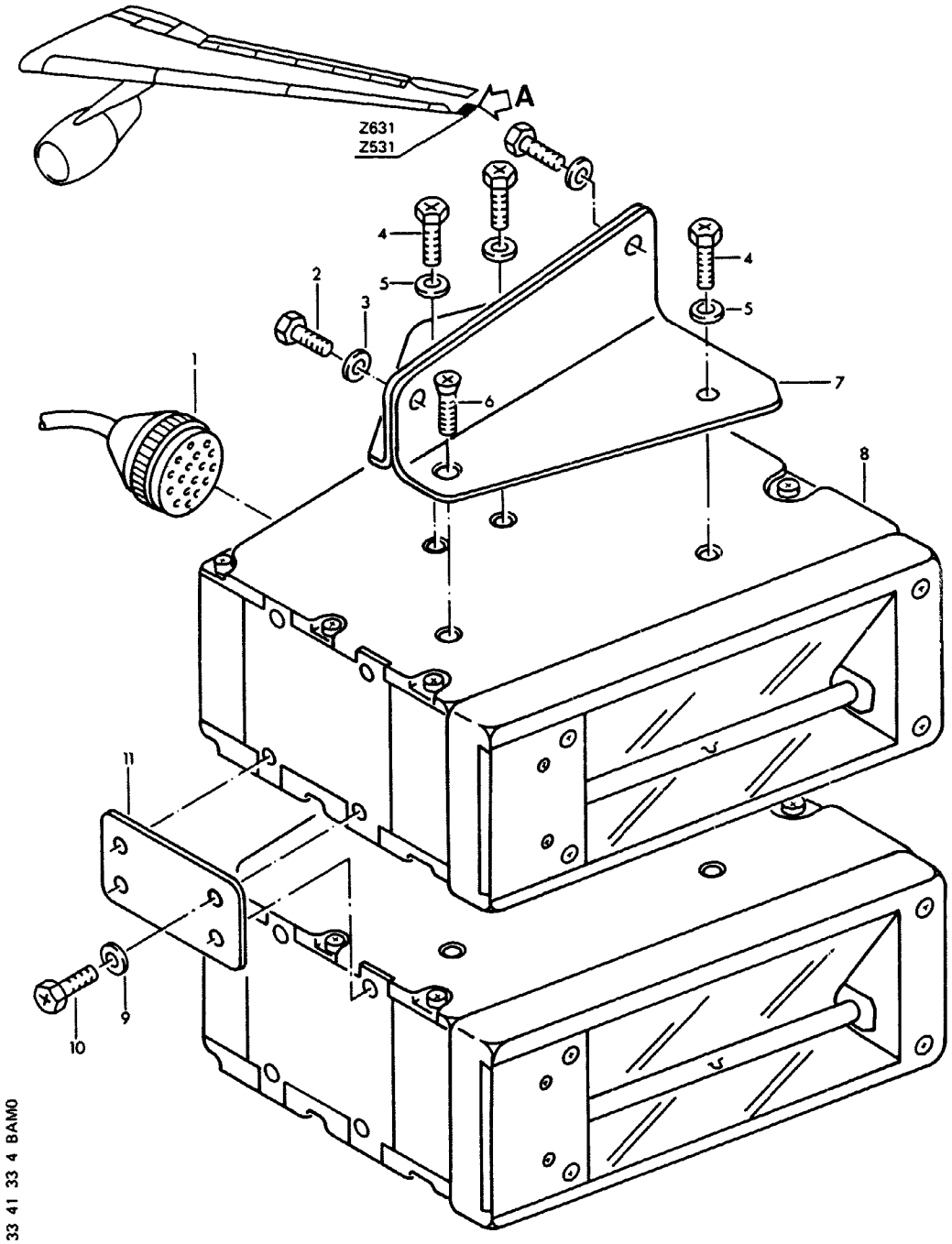
D. Test
(1)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(2)Remove safety clips and tags and close circuit breakers 1LA, 11LA and 11LV.
(3)Perform an operational test on forward strobe light 13LV (14LV).

ACTION	RESULT
1. On EXT LT panel 426VU - place STROBE switch 2LV in position STROBE ON.	At wing tip (zone 531/631) - Strobe light 13LV (14LV) flashes at a frequency of approximately 60 flashes/minute.
- place STROBE switch 2LV in position OFF.	- Strobe light 13LV (14LV) goes off.

E. Close-Up
(1)De-energize the aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).
(2)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(3)Close access door 531/631AB.

R **ON A/C 001-100,

(1)Disconnect electrical connectors (1).
(2)Remove screws (2) with washers (3).
(3)Remove strobe light units 23LV/29LV (24LV/26LV).
NOTE : If strobe light units are removed for access to strobe lamps - only steps (1) to (3) should be carried out.
(4)Remove screws (4) with washers (5).



Installation of Strobe Lights
Figure 402

(5)Remove countersunk screws (6) and separate mounting brackets (7) from light units (8).
(6)Remove screws (9) with washers (10).
(7)Remove brackets (11) and separate light units (8).

C. Installation (Ref. Fig. 402)
(1)Position light units (8) together with bracket (11).
(2)Install screws (9) and washers (10).
(3)Position mounting brackets (7) and install countersunk screws (6).
(4)Install screws (4) and washers (5).
(5)Using a soft, lint-free cloth, clean light unit lenses.
(6)Using a soft, lint-free cloth, clean inside of wing tip lense.
(7)Position strobe light units in wing tip and install screws (2) with washers (3).
(8)Connect electrical connectors (1).

D. Test
(1)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(2)Remove safety clips and tags and close circuit breakers 11LV, 1LA and 11LA.
(3)Carry out a functional check of the FWD strobe lights.

ACTION	RESULT
1. On EXT LT Panel 426VU - Place STROBE switch 2LV in position ON.	At wing tip, zone 531 (631) - Strobe lights 23LV/29LV (24LV/26LV) flash.
2. On EXT LT Panel 426VU - Place STROBE switch 2LV in position OFF.	At wing tip, zone 531 (631) - Strobe lights 23LV/29LV (24LV/26LV) go off.

E. Close-Up
(1)De-energize the aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).
(2)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(3)Close access door 531AB (631AB).
(4)Remove access platform.

LANDING LIGHTS - DESCRIPTION AND OPERATION

1. General

Adequate lighting, when the aircraft is landing, is provided by two retractable lights fitted to the underside of the wings. The lights are designed for use at all speeds.

2. Component Location

(Ref. Fig. 001)

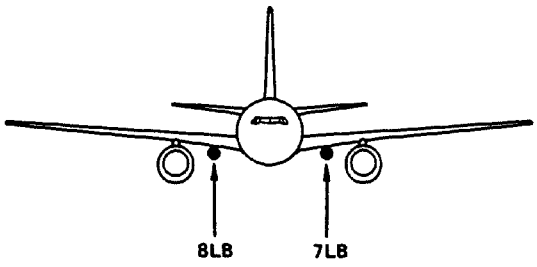
FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF.
5LB	SWITCH LAND/L	426VU	212		
6LB	SWITCH LAND/R	426VU	212		
7LB	LANDING LIGHT		571		
8LB	LANDING LIGHT		671		

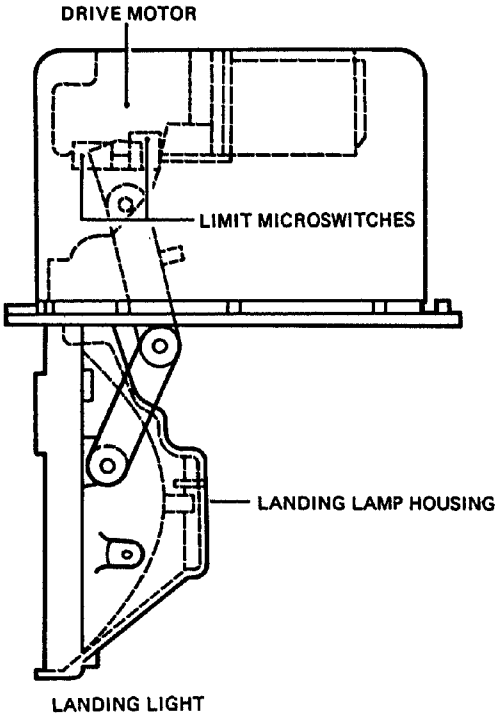
3. Description

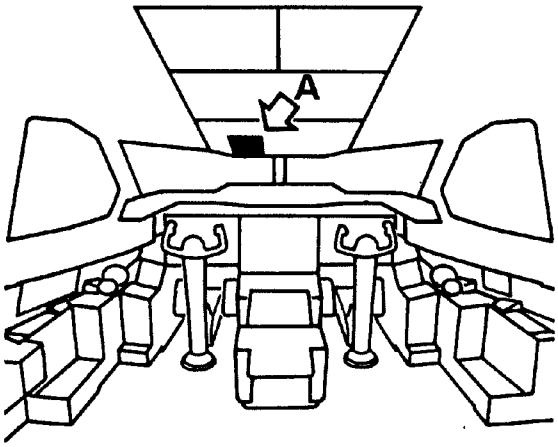
A. Landing lights (7LB and 8LB) are installed on the LH and RH wings respectively. Each light comprises:
- a single-phase motor, with an electromagnetic brake, which drives a rotating screw via a gearbox to extend and retract the lamp housing.
- a lamp housing which contains a sealed beam 28 V, 600 W quartz lamp.
- a step-down transformer, which is attached to the gearbox housing.
- two sealed limit microswitches.
- a power relay.
- a full-wave rectifier.

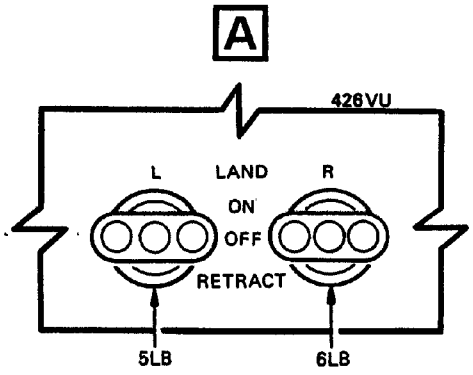
B. The lights are separately controlled by toggle switches LAND/L (5LB) and LAND/R (6LB) installed on panel 426VU in the flight compartment. The switch positions are labelled ON, OFF and RETRACT.

C. The system is supplied by the 115 V AC busbars 103XP-A and 202XP-B via monitoring circuit breakers 1LB thru 4LB. A corresponding annunciator labelled OPEN, comes on when the circuit breaker is open and the busbar is energized.









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Component Locations
Figure 001

4. Operation (Ref. Fig. 002)

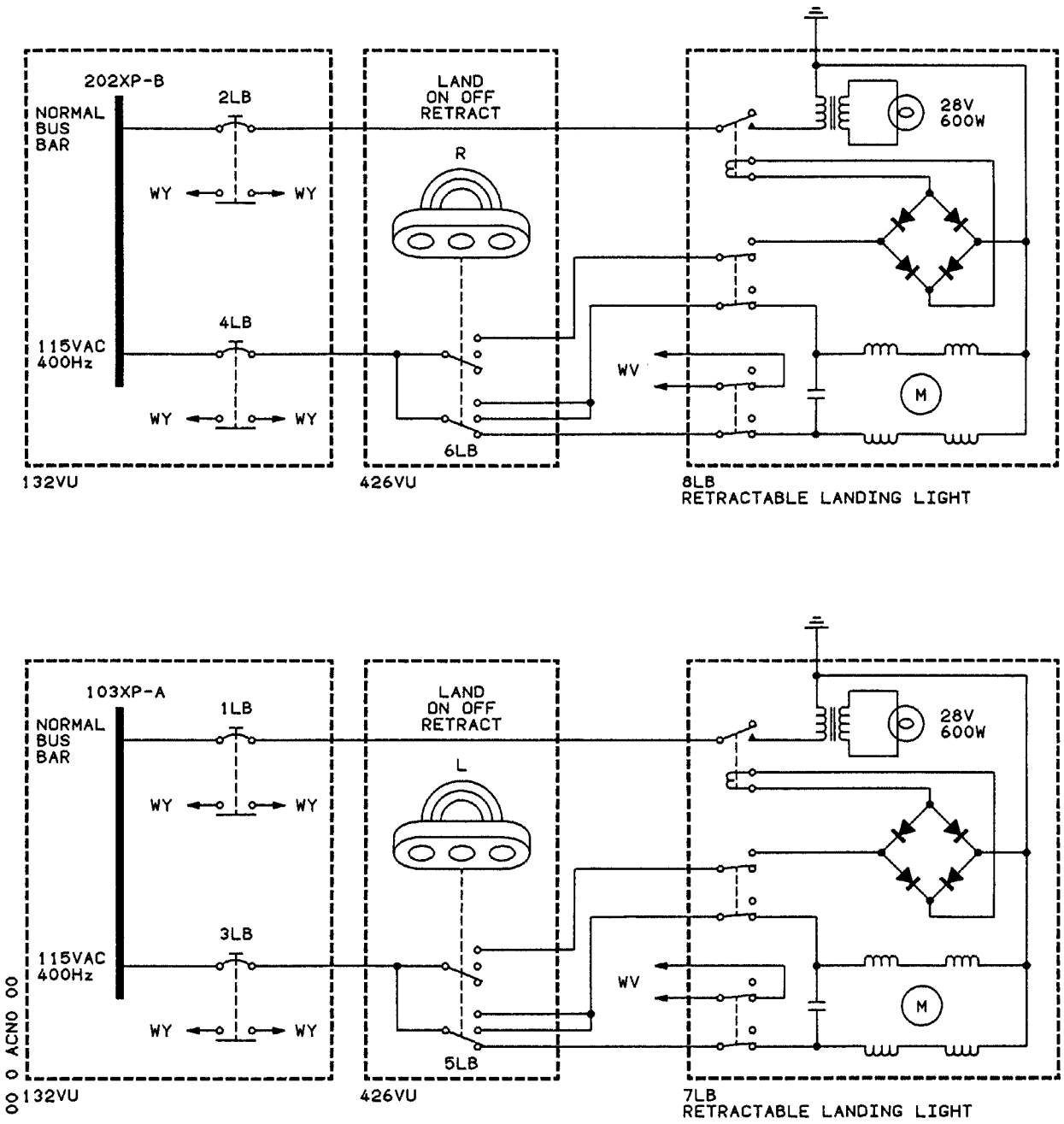
A. When the busbars are energized and the circuit breakers are closed, 115 V AC is supplied to the retractable landing light.

B. In the OFF position and the light retracted, the control switch energizes the extend coil of the motor via a microswitch to extend the light.

C. In the ON position and the light extended, the control switch energizes the power relay via the rectifier and the closed contacts of a microswitch to supply 115 V AC to the transformer. The transformer reduces the voltage to 26 V AC and the light comes on.

D. In the OFF position and the light extended, the control switch de-energizes the power relay, and the light goes off.

E. In the RETRACT position and the light extended, the control switch energizes the retract coil of the motor to fully retract the light. The lamp remains off.



WY = 31-69-00 CIRCUIT BREAKER MONITORING SYSTEM
WV = 31-55-00 SYSTEM DATA ANALOG CONVERTER

B M 6 33 42 00 0 ACN0 00

Landing Lights - Schematic
Figure 002

CAUTION : MOTOR INTERMITTENT OPERATION: 3 MIN. ON TIME - 17 MIN. REST.
LIGHT OPERATION CYCLE: ON TIME, 15 MIN. - OFF TIME, 45 MIN.

1. Operational Test

A. Reason for the Job
Operational test of landing lights.

B. Equipment and Materials

ITEM	DESIGNATION
(1)	Electrical Ground Power Unit - 3-Phase, 115/200 V, 400 Hz
Referenced Procedure - 24-41-00, P. Block 301	AC External Power Control

C. Procedure
(1)Job Set-Up
(a)Connect electrical ground power unit and energize aircraft electrical network (Ref. 24-41-00, P. Block 301).
(b)Make certain that electronic racks ventilation is correct.
(c)Make certain that the following circuit breakers are closed:

PANEL	SERVICE	IDENT.	LOCATION
132VU	LIGHTING - EXTERIOR LT - LAND L SUPPLY	1LB	N80
132VU	LIGHTING - EXTERIOR LT - LAND R SUPPLY	2LB	M78
132VU	LIGHTING - EXTERIOR LT - LAND L CTL	3LB	N81
132VU	LIGHTING - EXTERIOR LT - LAND R CTL	4LB	M77

(2)Test
CAUTION : MOTOR INTERMITTENT OPERATION: 3 MIN. ON TIME - 17 MIN. REST.
LIGHT OPERATION CYCLE: ON TIME, 15 MIN. - OFF TIME, 45 MIN.

ACTION	RESULT
1. External light control panel 426VU: - place toggle switch LAND 5LB or LAND 6LB in ON position. - place toggle switch LAND 5LB or LAND 6LB in OFF position. - place toggle switch LAND 5LB or LAND 6LB in RETRACT position. - place toggle switch LAND 5LB or LAND 6LB in OFF position. - place toggle switch LAND 5LB or LAND 6LB in RETRACT position.	Zone 571 or 671: - landing light 7LB or 8LB extends within 10 secs. and lamp comes on. - landing light lamp 7LB or 8LB goes off. - landing light 7LB or 8LB retracts within 10 secs. - landing light 7LB or 8LB extends. - landing light 7LB or 8LB retracts.

(3)Close-Up
(a)De-energize aircraft electrical network and disconnect ground power unit (Ref. 24-41-00, P. Block 301).

2. Adjustment

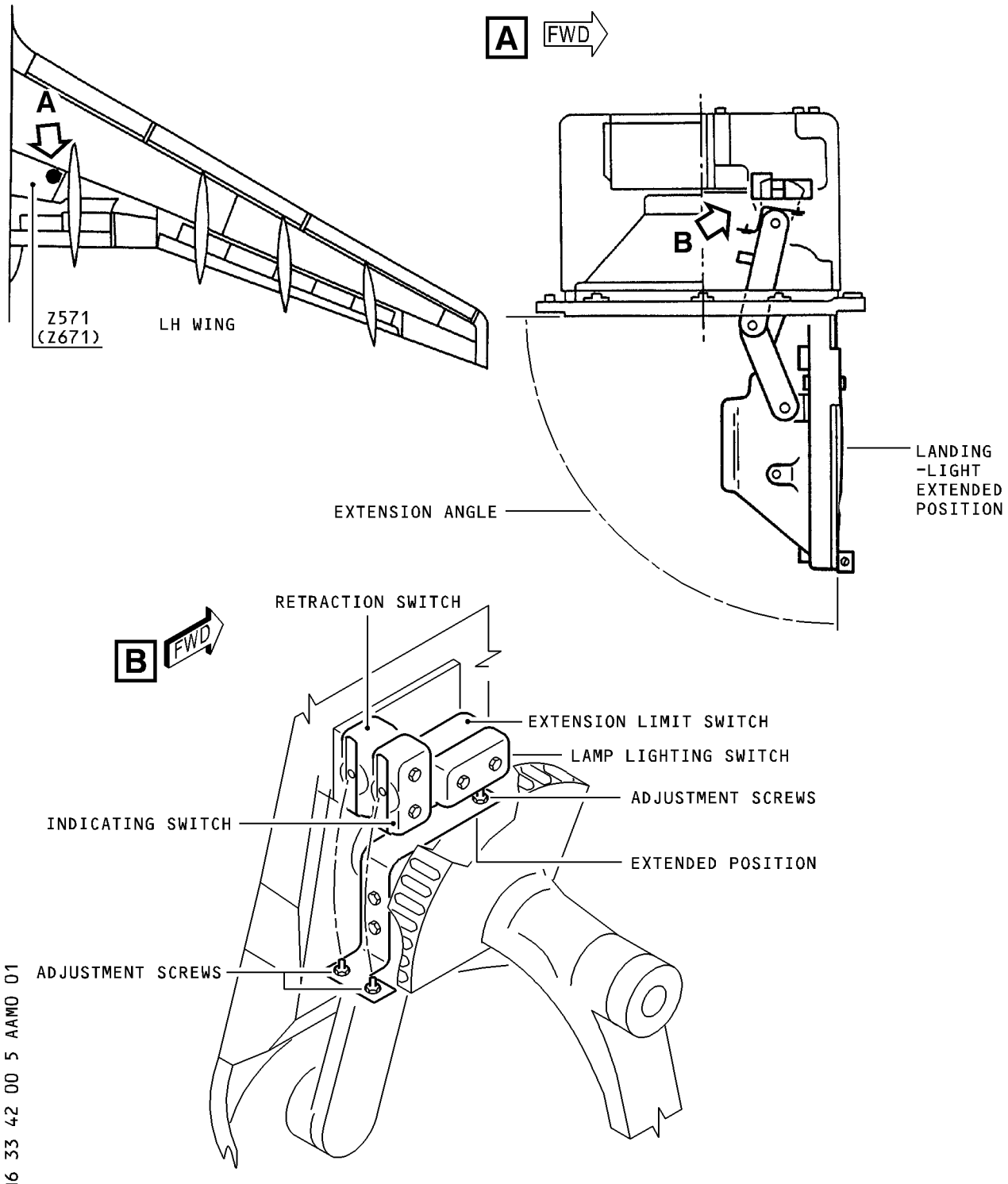
A. Reason for the Job
Adjustment of the extension angle.

B. Equipment and Materials

ITEM	DESIGNATION
(1)	Access Platform 2.60 m (8 ft. 6 in.)
(2)	Electrical Ground Power Unit 3 Phase 115/200 V, 400 Hz
(3)	Vernier Protractor

Referenced Procedure
- 24-41-00, P. Block 301 — AC External Power Control

C. Procedure (Ref. Fig. 501)
(1)Job Set-Up
(a)Connect electrical ground power unit and energize aircraft electrical network (Ref. 24-41-00, P. Block 301).
(b)Make certain that electronic racks ventilation is correct.
(c)Make certain that circuit breakers 3LB and 4LB are closed.
R (d)On panel 426VU place toggle switches LAND 5LB and 6LB in position ON.
R (e)Make sure that landing light 7LB or 8LB extends within 10 secs. and
R lamp comes on.
R (f)On panel 426VU place toggle switch LAND 5LB or LAND 6LB in position
R OFF.
R (g)Make sure that the lamp goes off on landing light 7LB or 8LB.
(2)Adjustment
(a)Measure the extension angle of the landing light with the vernier protractor.
R (b)The angle should read more than 83 degrees and less than 85 degrees.
(c)Open circuit breakers 3LB and 4LB.
R CAUTION : DO NOT ADJUST THE ANGLE TO MORE THAN 85 DEGREES. DOING SO CAN DAMAGE THE MOTOR.
(d)If adjustment is necessary, turn the adjustment screw of the extension limit switch:
- Clockwise to decrease the extension angle
- Counterclockwise to increase the extension angle.
NOTE : Do the adjustment with small moments each time. Always adjust the light ON/OFF switch by the same amount (and in the same direction) when you adjust the extension limit switch.
WARNING : MAKE SURE THAT THE TRAVEL RANGE OF THE LANDING LIGHT REMAINS CLEAR. IF AN ADJUSTMENT IS MADE, IT IS POSSIBLE THAT THE LANDING LIGHT MOVES.
(e)Close circuit breakers 3LB and 4LB.



Landing Light Extension Limit Switch Assembly
Figure 501

R

R (f)Make sure that the landing lights stop at the fully extended position.
(g)Open circuit breakers 3LB and 4LB.
(h)Measure the extension angle of the landing light again.
(j)If necessary adjust again until the extension angle is correct.
(k)On panel 426VU place toggle switches LAND 5LB and 6LB in position RETRACT.

(3)Close-Up
(a)De-energize aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).
(b)Make certain that the working area is clean and clear of tools and miscellaneous items of equipment.
(c)Remove access platform.

R 1. Removal/Installation of Landing Light (7LB, 8LB)

A. Reason for the Job

R Purpose of this procedure is to do removal/installation of landing light unit (7LB, 8LB).

B. Equipment and Materials

ITEM	DESIGNATION
(1)	Access Platform 2.60 m (8 ft. 8 in.)
(2)	Electrical Ground Power Unit - 3-Phase, 115V/200 V, 400 Hz, 90 KVA
(3)	Circuit Breaker Safety Clips
(4)	Blanking Plugs/Caps
R (5)	Torque Wrench 0 to 2 m.daN (0 to 177 lbf.in.)
R (6)Material No.19-003	Miscellaneous (Ref. 20-31-00)
Referenced Procedures	
-33-42-00, P. Block 501	Landing Lights

C. Procedure

R (1)Job Set-up

R (a)Open, safety and tag following circuit breakers :

PANEL	SERVICE	IDENT.	LOCATION
132VU	LIGHTING/EXT LT/LAND/L/SUPPLY	1LB	322/N80
132VU	LIGHTING/EXT LT/LAND/R/SUPPLY	2LB	323/M78
132VU	LIGHTING/EXT LT/LAND/L/CTL	3LB	322/N81
132VU	LIGHTING/EXT LT/LAND/R/CTL	4LB	323/M77

(b)Position access platform as applicable :
- For 7LB
  below zone 571
- For 8LB
  below zone 671.

(2)Removal

(Ref. Fig. 401)

R CAUTION : WEAR GLASSES AND PROTECTIVE CLOTHING WHEN YOU WORK ON LIGHT.

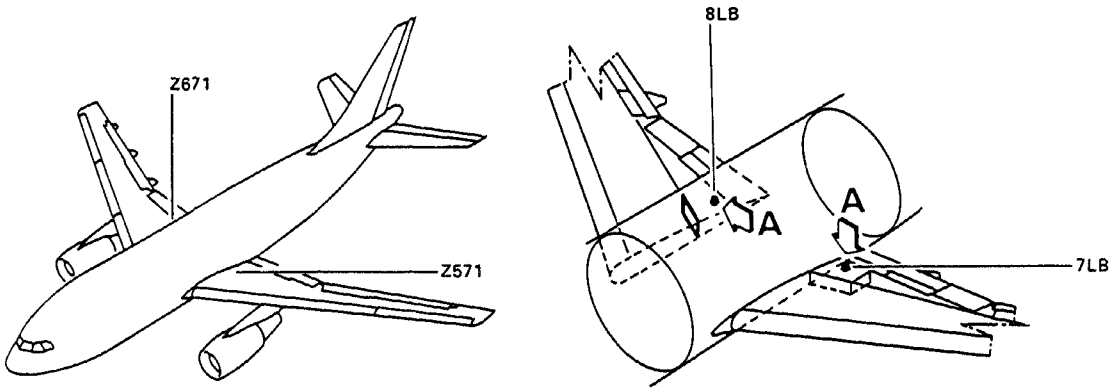
R HALOGEN CYCLE LAMP IS PRESSURIZED AND MAY EXPLODE.

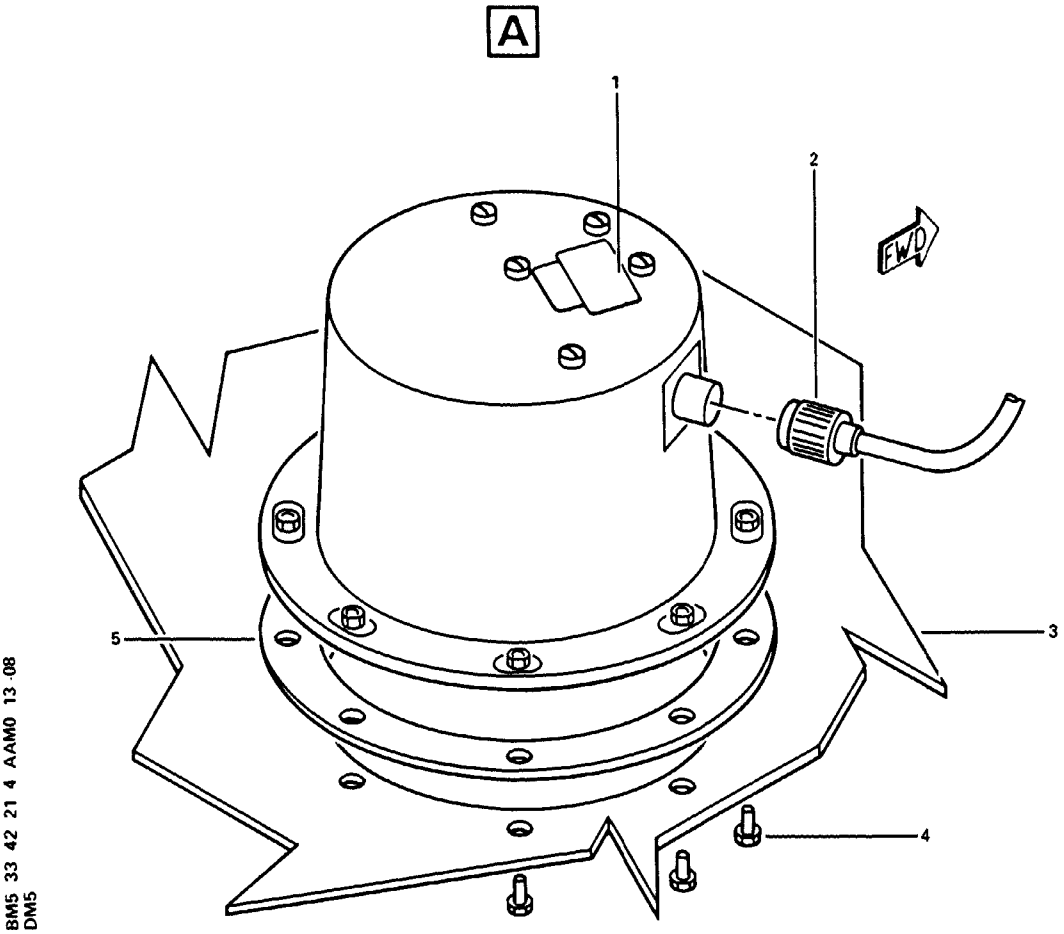
(a)Disconnect electrical connector (2) from light assembly (1).

(b)Put blanking cap on electrical connector.

(c)Remove attachment screws (4).

(d)Remove light assembly (1) and gasket (5).





Landing Light 7LB (8LB)
Figure 401

R (3)Preparation for replacement of component
(a)Clean and inspect light assembly interface and/or adjacent area.
(b)Check for correct condition of lamp reflector, lamp glass and electrical connector.
(4)Installation
R CAUTION : WEAR GLASSES AND PROTECTIVE CLOTHING WHEN YOU WORK ON LIGHT.
R HALOGEN CYCLE LAMP IS PRESSURIZED AND MAY EXPLODE.
(a)Install light assembly (1) with gasket (5) on support (3).
(b)Install and tighten attachment screws (4).
(c)Remove blanking cap from electrical connector.
(d)Connect electrical connector (2) to light assembly.
R (e)Clean landing light lamp glass with lint-free cotton cloth
R (Material No.19-003).
(5)Test
(a)Remove safety clips and tags and close circuit breakers 1LB, 2LB, 3LB and 4LB.
(b)Do the operational test of landing lights (Ref. 33-42-00, P. Block 501).
(6)Close-Up
(a)Make sure that working area is clean and clear of tools and miscellaneous items of equipment.
(b)Remove access platform.

R 2. Removal/Installation of Lamp Assembly

A. Reason for the Job

R Purpose of this procedure is to do removal/installation of lamp
R assembly with sealed beam (GE technology).

B. Equipment and Materials

ITEM	DESIGNATION
(1)	Access Platform 2.60 m (8 ft. 8 in.)
(2)	Electrical Ground Power Unit - 3-Phase, 115V/200 V, 400 Hz, 90 KVA
(3)	Circuit Breaker Safety Clips
(4)	Blanking Plugs/Caps
R (5)	Torque Wrench 0 to 2 m.daN (0 to 177 lbf.in.)
Referenced Procedures	
- 33-42-00, P. Block 501	Landing lights

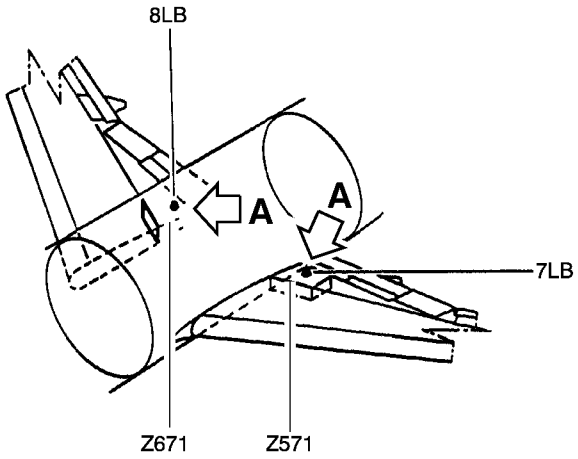
C. Procedure

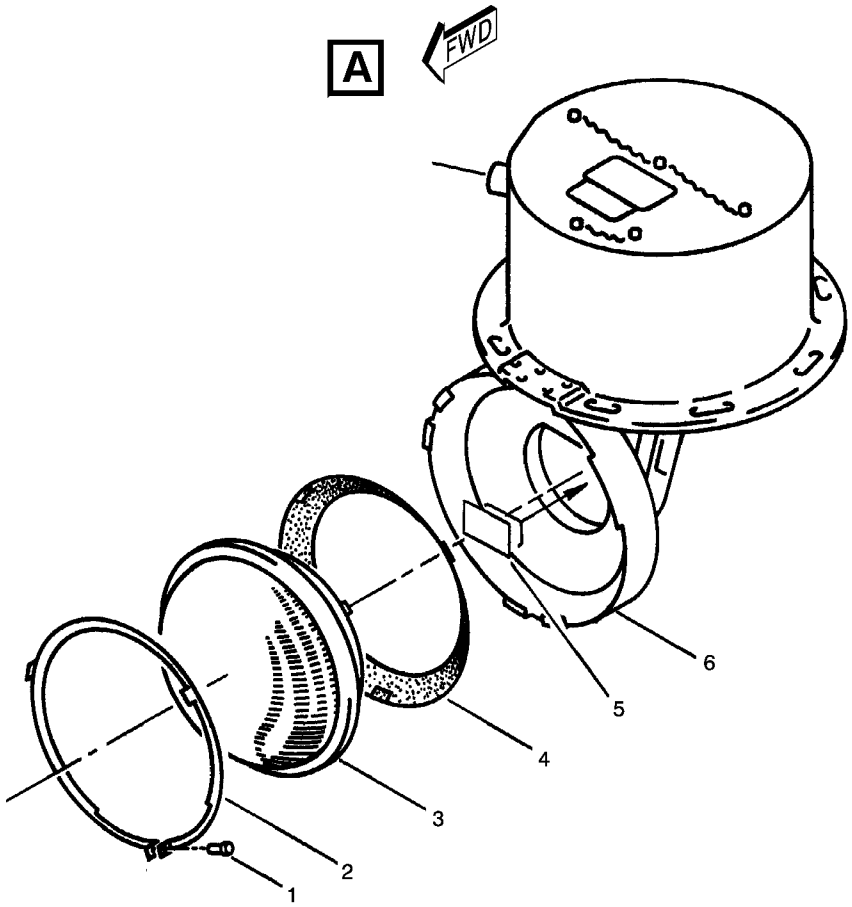
R (1)Job Set-up
(a)On EXT LT panel 426VU, place LAND toggle switch 5LB(6LB) in ON position and make sure that landing light 7LB(8LB) is in extended position.
R (b)Open, safety and tag following circuit breakers :

PANEL	SERVICE	IDENT.	LOCATION
132VU	LIGHTING/EXT LT/LAND/L/SUPPLY	1LB	322/N80
132VU	LIGHTING/EXT LT/LAND/R/SUPPLY	2LB	323/M78
132VU	LIGHTING/EXT LT/LAND/L/CTL	3LB	322/N81
132VU	LIGHTING/EXT LT/LAND/R/CTL	4LB	323/M77

(c)Position access platform as applicable :
- For 7LB
below zone 571
- For 8LB
below zone 671.

(2)Removal
(Ref. Fig. 402)
R CAUTION : WEAR GLASSES AND PROTECTIVE CLOTHING WHEN YOU WORK ON LIGHT.
R HALOGEN CYCLE LAMP IS PRESSURIZED AND MAY EXPLODE.
(a)Remove screw (1) and clamp (2).
(b)Loosen lamp assembly (3) and seal (4).
(c)Disconnect the two electrical terminals from lamp assembly (3).





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Lamp Assembly (GE Technology)
Figure 402

R

(d)Remove lamp assembly (3) from lamp housing (6).

(3)Installation

R CAUTION : WEAR GLASSES AND PROTECTIVE CLOTHING WHEN YOU WORK ON LIGHT.
R HALOGEN CYCLE LAMP IS PRESSURIZED AND MAY EXPLODE.

(a)Install new lamp assembly (3) on lamp housing (6).

(b)Connect the two electrical terminals to lamp assembly (3).

(c)Position lamp assembly (3) with seal (4) in lamp housing (6).

R Make certain that you place filament horizontally, in accordance with indications on filament position plate (5).

(d)Install clamp (2) using screw (1).

R (e)TORQUE screw (1) to 0.08 m.daN (7.07 lbf.in.).

(4)Test

(a)Remove safety clips and tags and close circuit breakers 1LB, 2LB, 3LB and 4LB.

R (b)Do operational test of landing lights (Ref. 33-42-00, P. Block 501).

(5)Close-Up

(a)Make sure that working area is clean and clear of tools and miscellaneous items of equipment.

(b)Remove access platform.

R 3. Removal/Installation of SHL Lamp Assembly

A. Reason for the Job

R Purpose of this procedure is to do removal/installation of SHL lamp assembly (substitute halogen lamp).

B. Equipment and Materials

ITEM	DESIGNATION
(1)	Access Platform 2.60 m (8 ft. 8 in.)
(2)	Electrical Ground Power Unit - 3-Phase, 115V/200 V, 400 Hz, 90 KVA
(3)	Circuit Breaker Safety Clips
(4)	Blanking Plugs/Caps
R (5)	Torque Wrench 0 to 2 m.daN (0 to 177 lbf.in.)
R (6)Material No.19-003	Miscellaneous (Ref. 20-31-00)
Referenced Procedures	
R - 33-42-00, P. Block 501	Landing Lights

C. Procedure

R (1)Job Set-up

(a)On EXT LT panel 426VU, place LAND toggle switch 5LB(6LB) in ON position and make sure that landing light 7LB(8LB) is in extended position.

R (b)Open, safety and tag following circuit breakers :

PANEL	SERVICE	IDENT.	LOCATION
132VU	LIGHTING/EXT LT/LAND/L/SUPPLY	1LB	322/N80
132VU	LIGHTING/EXT LT/LAND/R/SUPPLY	2LB	323/M78
132VU	LIGHTING/EXT LT/LAND/L/CTL	3LB	322/N81
132VU	LIGHTING/EXT LT/LAND/R/CTL	4LB	323/M77

(c)Position access platform as applicable :

- For 7LB
  below zone 571
- For 8LB
  below zone 671.

(2)Removal

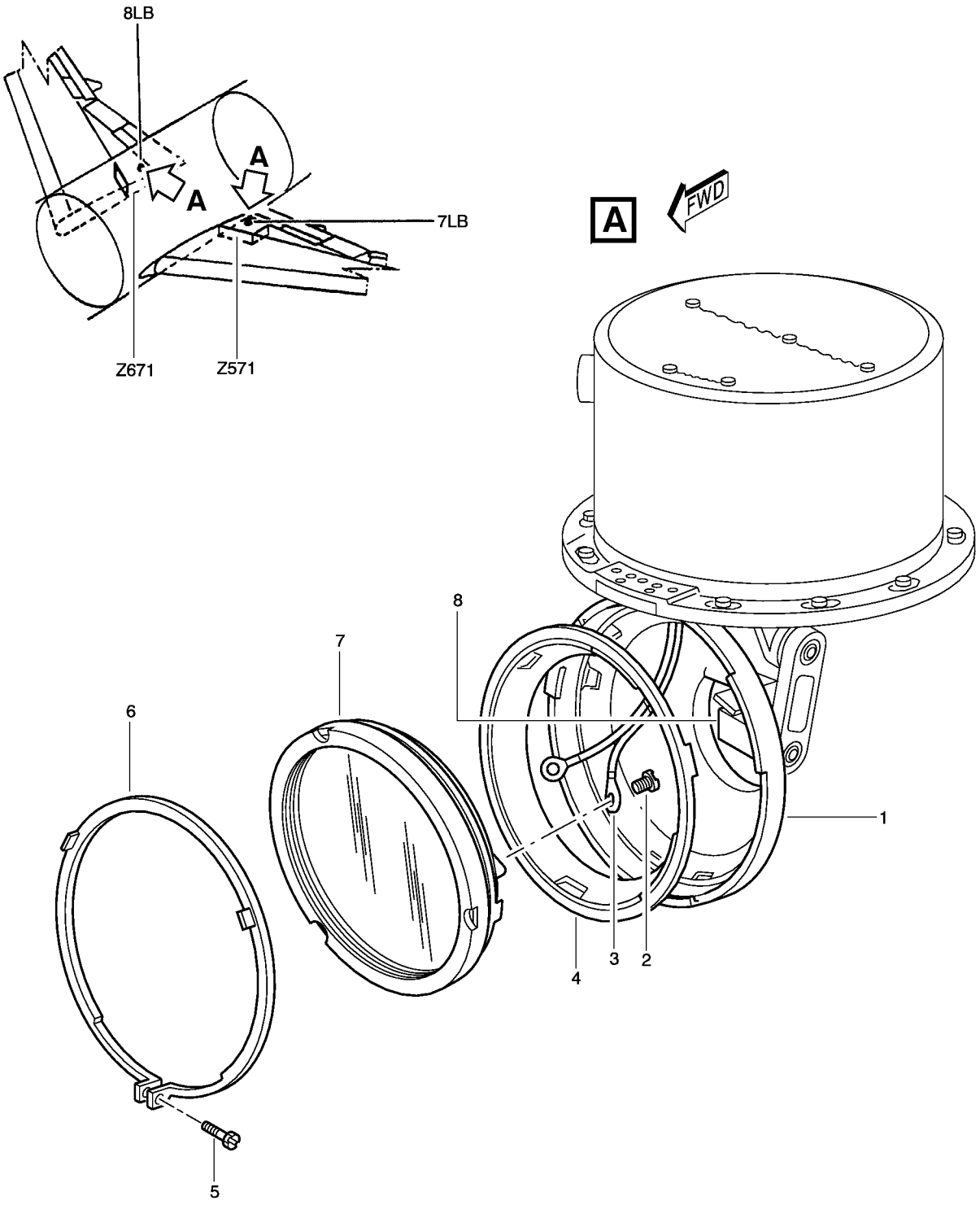
(Ref. Fig. 403)

R CAUTION : WEAR GLASSES AND PROTECTIVE CLOTHING WHEN YOU WORK ON LIGHT.

R HALOGEN CYCLE LAMP IS PRESSURIZED AND MAY EXPLODE.

R CAUTION : DO NOT TOUCH LAMP GLASS WITH YOUR FINGERS. OILS FROM

R YOUR SKIN WILL QUICKLY CAUSE DETERIORATION OF LAMP.



BM5 33 42 21 4 AEM0 00

Lamp Assembly (SHL Technology)
Figure 403

R

R IF YOU ACCIDENTALLY TOUCH LAMP GLASS, CLEAN IT WITH
LINT-FREE CLOTH, IF NECESSARY MOISTENED WITH WATER.
DRY WITH LOW-PRESSURE COMPRESSED AIR JET. DO NOT USE ALCOHOL.

(a)Loosen screw (5) and remove clamp (6).

(b)Remove lamp assembly (7) from lamp housing (1) to get access to electrical terminals (3).

(c)Remove screws (2) and disconnect the two electrical terminals (3).

(d)Remove lamp assembly (7) and seal (4) if necessary.

(3)Installation

R CAUTION : WEAR GLASSES AND PROTECTIVE CLOTHING WHEN YOU WORK ON LIGHT.
R HALOGEN CYCLE LAMP IS PRESSURIZED AND MAY EXPLODE.
R CAUTION : DO NOT TOUCH LAMP GLASS WITH YOUR FINGERS. OILS FROM
R YOUR SKIN WILL QUICKLY CAUSE DETERIORATION OF LAMP.
R IF YOU ACCIDENTALLY TOUCH LAMP GLASS, CLEAN IT WITH
LINT-FREE CLOTH, IF NECESSARY MOISTENED WITH WATER.
DRY WITH LOW-PRESSURE COMPRESSED AIR JET. DO NOT USE ALCOHOL.

R (a)Make sure that seal (4) is in good condition and correctly installed in lamp housing (1).

(b)Connect the two electrical terminals (3) to lamp assembly (7) with screws (2). Tighten screws (2).

R (c)Install lamp assembly (7) in lamp housing (1). Make certain that you place filament horizontally, in accordance with indications on filament position plate (8).

(d)Install clamp (6).

R (e)Tightening of screw (5)

R CAUTION : DO NOT USE BULB HANDLING TOOL GAGE TO TIGHTEN CLAMP.

1 Tighten screw (5) until screw head touches clamp tab (Ref. Fig. 406).

R NOTE : The minimum distance between the two clamp tabs is 0.39 in.
R (10 mm). You can use bulb handling tool gage as an aid to check this value.

(4)Test

(a)Remove safety clips and tags and close circuit breakers 1LB, 2LB, 3LB and 4LB.

R (b)Do operational test of landing lights (Ref. 33-42-00, P. Block 501).

(5)Close-Up

(a)Make sure that working area is clean and clear of tools and miscellaneous items of equipment.

(b)Remove access platform.

R 4. Replacement of SHL Bulb

A. Reason for the Job

R Purpose of this procedure is to do replacement of SHL bulb (substitute halogen lamp).

B. Equipment and Materials

ITEM	DESIGNATION
(1)	Access Platform 2.60 m (8 ft. 8 in.)
(2)	Electrical Ground Power Unit - 3-Phase, 115V/200 V, 400 Hz, 90 KVA
(3)	Circuit Breaker Safety Clips
(4)	Blanking Plugs/Caps
(5)	Adhesive Tape
(6)	Torque Wrench 0 to 2 m.daN (0 to 177 lbf.in.)
(7)Material No. 19-003	Miscellaneous (Ref. 20-31-00)
R (8)Material No. 11-010	Cleaning Agents (Ref. 20-31-00)
Referenced Procedures	
R - 33-42-00, P. Block 501	Landing Lights

C. Procedure

R (1)Job Set-up

(a)On EXT LT panel 426VU, place LAND toggle switch 5LB(6LB) in ON position and make sure that landing light 7LB(8LB) is in extended position.

R (b)Open, safety and tag following circuit breakers :

PANEL	SERVICE	IDENT.	LOCATION
132VU	LIGHTING/EXT LT/LAND/L/SUPPLY	1LB	322/N80
132VU	LIGHTING/EXT LT/LAND/R/SUPPLY	2LB	323/M78
132VU	LIGHTING/EXT LT/LAND/L/CTL	3LB	322/N81
132VU	LIGHTING/EXT LT/LAND/R/CTL	4LB	323/M77

(c)Position access platform as applicable :

- For 7LB
  below zone 571
- For 8LB
  below zone 671.

(2)Removal

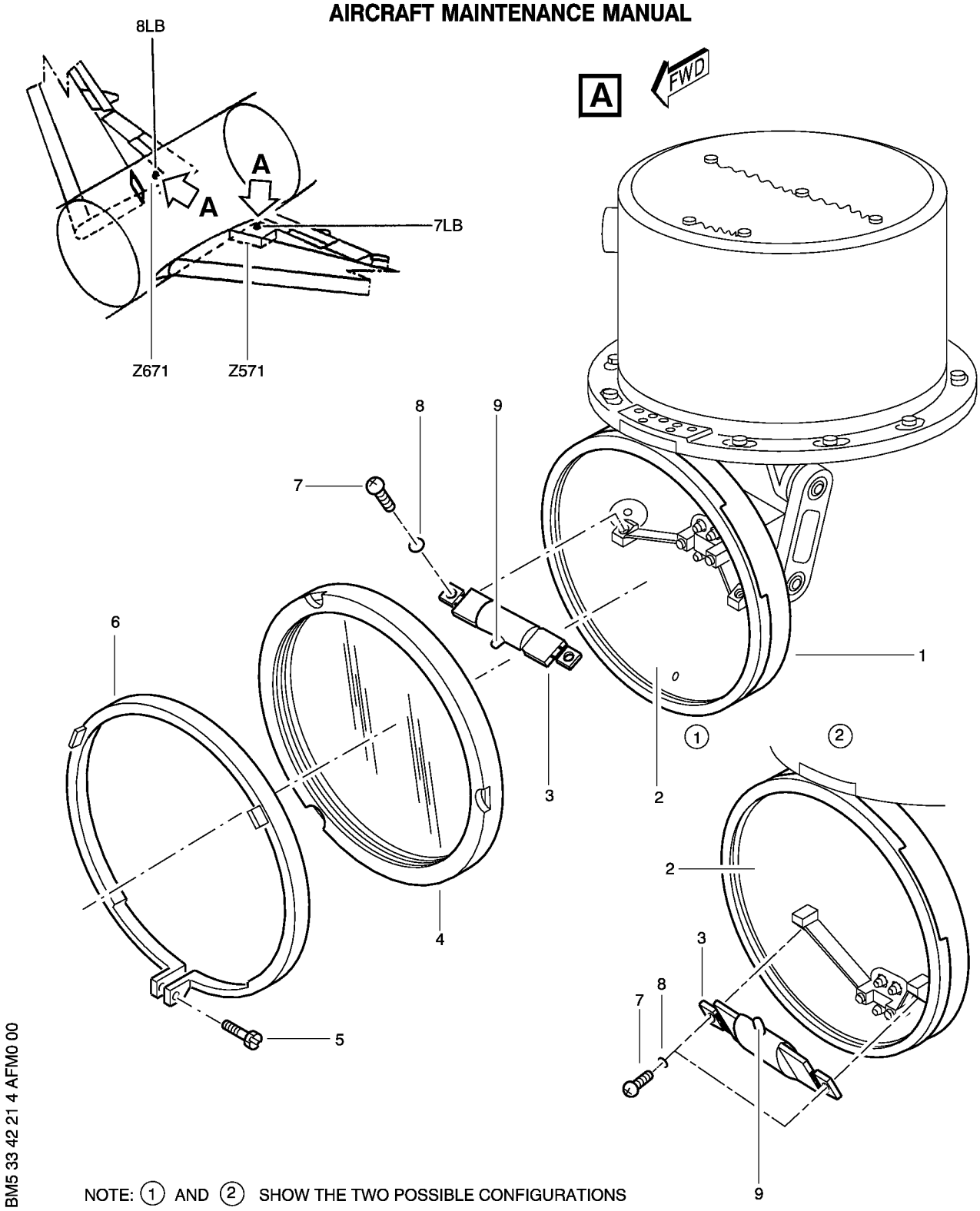
(Ref. Fig. 404)

R CAUTION : WEAR GLASSES AND PROTECTIVE CLOTHING WHEN YOU WORK ON LIGHT.

R HALOGEN CYCLE LAMP IS PRESSURIZED AND MAY EXPLODE.

R CAUTION : DO NOT TOUCH LAMP GLASS WITH YOUR FINGERS. OILS FROM

R YOUR SKIN WILL QUICKLY CAUSE DETERIORATION OF LAMP.



Bulb (SHL Technology)
Figure 404

R

R IF YOU ACCIDENTALLY TOUCH LAMP GLASS, CLEAN IT WITH
LINT-FREE CLOTH, IF NECESSARY MOISTENED WITH WATER.
DRY WITH LOW-PRESSURE COMPRESSED AIR JET. DO NOT USE ALCOHOL.
R CAUTION : ONLY HANDLE BULB AND MIRROR WITH CLEAN LINT-FREE
GLOVES.
R CAUTION : DO NOT REMOVE THE TWO GASKET COMPONENTS BONDED ON MIRROR
R AND ON LENS.
(a)Loosen screw (5) and remove clamp (6).
(b)Pull equipped lens (4) away from equipped mirror (2).
R (c)Put adhesive tape to hold equipped mirror (2) in position on lamp
housing (1).
(d)Remove the two screws (7) and the two washers (8).
(e)Carefully remove and discard bulb (3).
(3)Installation
R CAUTION : WEAR GLASSES AND PROTECTIVE CLOTHING WHEN YOU WORK ON
LIGHT.
R HALOGEN CYCLE LAMP IS PRESSURIZED AND MAY EXPLODE.
R CAUTION : DO NOT TOUCH LAMP GLASS WITH YOUR FINGERS. OILS FROM
R YOUR SKIN WILL QUICKLY CAUSE DETERIORATION OF LAMP.
R IF YOU ACCIDENTALLY TOUCH LAMP GLASS, CLEAN IT WITH
LINT-FREE CLOTH, IF NECESSARY MOISTENED WITH WATER.
DRY WITH LOW-PRESSURE COMPRESSED AIR JET. DO NOT USE ALCOHOL.
R CAUTION : ONLY HANDLE BULB AND MIRROR WITH CLEAN LINT-FREE
GLOVES.
(a)Installation of bulb
R CAUTION : INSTALL BULB ON MIRROR WITH PINCH SEAL END DIRECTED
OUTWARDS TOWARDS LENS.
R CAUTION : ONLY HANDLE BULB WITH SUPPLIED HANDLING TOOL.
RETAIN HANDLING TOOL AFTER BULB INSTALLATION.
R 1 Carefully install new bulb (3).
(b)Install the two washers (8) and the two screws (7).
(c)Tighten the two screws (7) and apply an additional quarter turn
after contact.
R (d)If bulb is contaminated or has been touched with fingers, clean
R bulb with lint-free cotton cloth (Material No. 19-003), if necessary
moistened with water.
Dry with low pressure compressed air.
(e)Remove adhesive tape from equipped mirror (2).
(f)Clean component interface and/or adjacent area.
R (g)If necessary, clean surface of equipped lens (4) with isopropyl alcohol
R (Material No. 11-010).
R (h)Dry surface of equipped lens (4) with lint-free cotton cloth
R (Material No. 19-003).
R (j)Put equipped lens (4) in position on equipped mirror (2).
R (k)Install clamp (6).

R (l)Tightening of screw (5)
R CAUTION : DO NOT USE BULB HANDLING TOOL GAGE TO TIGHTEN CLAMP.
1 Tighten screw (5) until screw head touches clamp tab
(Ref. Fig. 406).
NOTE : The minimum distance between the two clamp tabs is

R 0.39 in. (10 mm). You can use bulb handling tool gage as an aid to check this value.

(4)Test

(a)Remove safety clips and tags and close circuit breakers 1LB, 2LB, 3LB and 4LB.

R (b)Do operational test of landing lights (Ref. 33-42-00, P. Block 501).

(5)Close-Up

(a)Make sure that working area is clean and clear of tools and miscellaneous items of equipment.

(b)Remove access platform.

5. Replacement of Lens and Mirror of SHL Lamp

A. Reason for the Job

R Purpose of this procedure is to do replacement of lens and mirror of SHL lamp (substitute halogen lamp).

B. Equipment and Materials

ITEM	DESIGNATION
(1)	Access Platform 2.60 m (8 ft. 8 in.)
(2)	Electrical Ground Power Unit - 3-Phase, 115V/200 V, 400 Hz, 90 KVA
(3)	Circuit Breaker Safety Clips
(4)	Blanking Plugs/Caps
(5)	Torque Wrench 0 to 2 m.daN (0 to 177 lbf.in.)
(6)Material No. 19-003	Miscellaneous (Ref. 20-31-00)
R (7)Material No. 11-010	Cleaning Agents (Ref. 20-31-00)
Referenced Procedures	
R - 33-42-00, P. Block 501	Landing Lights

C. Procedure

R (1)Job Set-up

(a)On EXT LT panel 426VU, place LAND toggle switch 5LB(6LB) in ON position and make sure that landing light 7LB(8LB) is in extended position.

(b)Open, safety and tag following circuit breakers :

PANEL	SERVICE	IDENT.	LOCATION
132VU	LIGHTING/EXT LT/LAND/L/SUPPLY	1LB	322/N80
132VU	LIGHTING/EXT LT/LAND/R/SUPPLY	2LB	323/M78
132VU	LIGHTING/EXT LT/LAND/L/CTL	3LB	322/N81
132VU	LIGHTING/EXT LT/LAND/R/CTL	4LB	323/M77

(c)Position access platform as applicable :

- For 7LB
  below zone 571
- For 8LB
  below zone 671.

(2)Removal

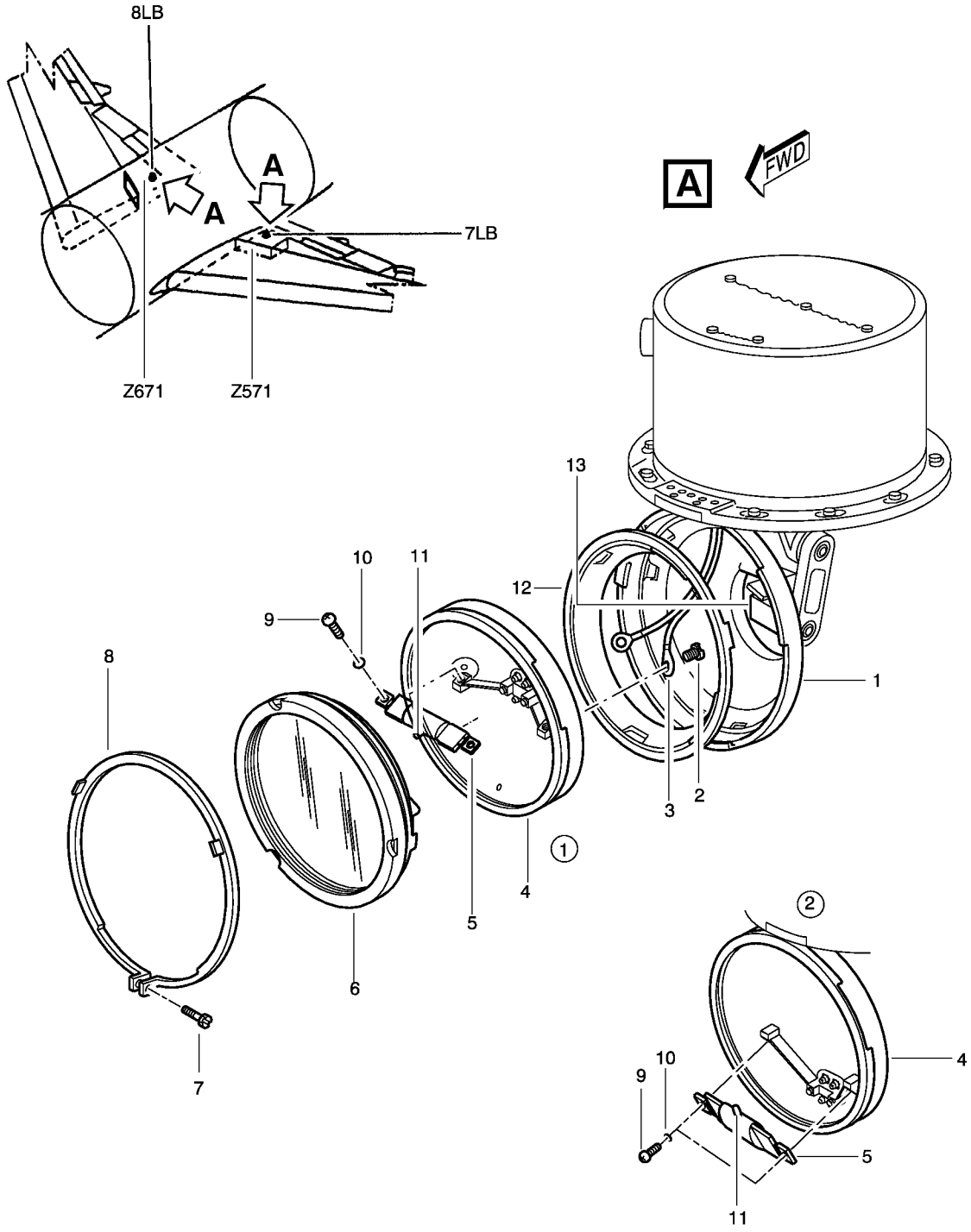
(Ref. Fig. 405)

R CAUTION : WEAR GLASSES AND PROTECTIVE CLOTHING WHEN YOU WORK ON LIGHT.

R HALOGEN CYCLE LAMP IS PRESSURIZED AND MAY EXPLODE.

R CAUTION : DO NOT TOUCH LAMP GLASS WITH YOUR FINGERS. OILS FROM

R YOUR SKIN WILL QUICKLY CAUSE DETERIORATION OF LAMP.



NOTE: (1) AND (2) SHOW THE TWO POSSIBLE CONFIGURATIONS

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Lens and Mirror (SHL Technology)
Figure 405

R

R IF YOU ACCIDENTALLY TOUCH LAMP GLASS, CLEAN IT WITH
LINT-FREE CLOTH, IF NECESSARY MOISTENED WITH WATER.
DRY WITH LOW-PRESSURE COMPRESSED AIR JET. DO NOT USE ALCOHOL.
R CAUTION : ONLY HANDLE BULB AND MIRROR WITH CLEAN LINT-FREE
GLOVES.

(a)Loosen screw (7) and remove clamp (8).
(b)Pull lamp assembly away from lamp housing (1) to get access to electrical terminals (3).
(c)Remove screws (2) and disconnect the two electrical terminals (3).
(d)Pull lens (6) away from mirror (4) and discard it.
R (e)Remove and discard mirror (4).
(f)Remove the two screws (9) and the two washers (10).
(g)Carefully remove and keep bulb (5).
(h)If gasket (12) on lamp housing (1) is defective, remove and discard it.

(3)Installation of lens and mirror

R CAUTION : WEAR GLASSES AND PROTECTIVE CLOTHING WHEN YOU WORK ON
LIGHT.
R HALOGEN CYCLE LAMP IS PRESSURIZED AND MAY EXPLODE.
R CAUTION : DO NOT TOUCH LAMP GLASS WITH YOUR FINGERS. OILS FROM
R YOUR SKIN WILL QUICKLY CAUSE DETERIORATION OF LAMP.
R IF YOU ACCIDENTALLY TOUCH LAMP GLASS, CLEAN IT WITH
LINT-FREE CLOTH, IF NECESSARY MOISTENED WITH WATER.
DRY WITH LOW-PRESSURE COMPRESSED AIR JET. DO NOT USE ALCOHOL.
R CAUTION : ONLY HANDLE BULB AND MIRROR WITH CLEAN LINT-FREE
GLOVES.

(a)Make sure that bulb (5) is not damaged.
R (b)Installation of bulb
R CAUTION : INSTALL BULB ON MIRROR WITH PINCH SEAL END (11) DIRECTED
OUTWARDS TOWARDS LENS.
R NOTE : If available, use handling tool to adjust bulb.
Retain handling tool after bulb installation.
R 1 Carefully put bulb (5) in position on new mirror (4).
(c)Install the two washers (10) and the two screws (9).
(d)Tighten the two screws (9) and apply an additional quarter turn after contact.
R (e)If bulb is contaminated or has been touched with fingers, clean
R bulb with lint-free cotton cloth (Material No. 19-003), if necessary moistened with water.
Dry with low pressure compressed air.
R (f)If required, install new gasket (12) on lamp housing (1).
R (g)Put new lens (6) in position on new mirror (4) with bulb (5) installed.
(h)Clean component interface and/or adjacent area.
R (j)If necessary, clean surface of lens (6) with isopropyl alcohol
R (Material No. 11-010).
R (k)Dry surface of lens (6) with lint-free cotton cloth (Material No. 19-003).
R (l)Connect the two electrical terminals (3) to mirror (4) with screws (2). Tighten screws (2).
R (m)Install lamp assembly in lamp housing (1). Make certain that you place filament horizontally, in accordance with indications on

filament position plate (13).

R (n)Install lamp (8).

R (p)Tightening of screw

R CAUTION : DO NOT USE BULB HANDLING TOOL GAGE TO TIGHTEN CLAMP.

1 Tighten screw (5) until screw head touches clamp tab (Ref. Fig. 406).

R NOTE : The minimum distance between the two clamp tabs is
R 0.39 in. (10 mm). You can use bulb handling tool gage as an aid to check this value.

(4)Test

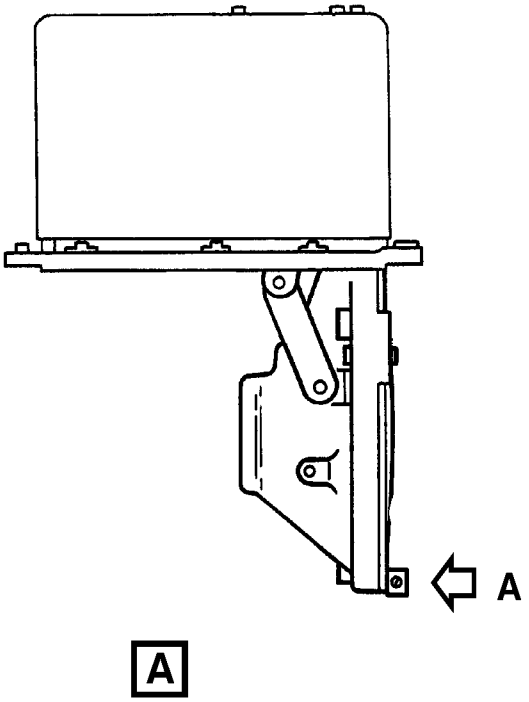
(a)Remove safety clips and tags and close circuit breakers 1LB, 2LB, 3LB and 4LB.

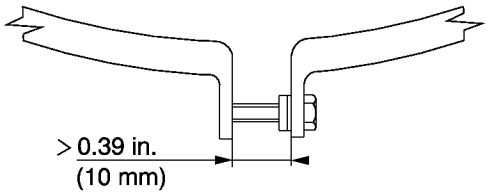
R (b)Do operational test of landing lights (Ref. 33-42-00, P. Block 501).

(5)Close-Up

(a)Make sure that working area is clean and clear of tools and miscellaneous items of equipment.

(b)Remove access platform.





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R

Spacing between Clamp Tabs
Figure 406

RUNWAY TURNOFF LIGHTS - DESCRIPTION AND OPERATION

1. General

The runway turnoff lighting is provided by two 250 W filament lights. The lights illuminate the lateral areas of the runway.

2. Component Location

(Ref. Fig. 001)

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA. REF.
3LC	TURNOFF LIGHT		121		33-43-11
4LC	TURNOFF LIGHT		122		33-43-11
5LC	SWITCH-RWY TURN OFF/L	426VU	211		
6LC	SWITCH-RWY TURN OFF/R	426VU	211		

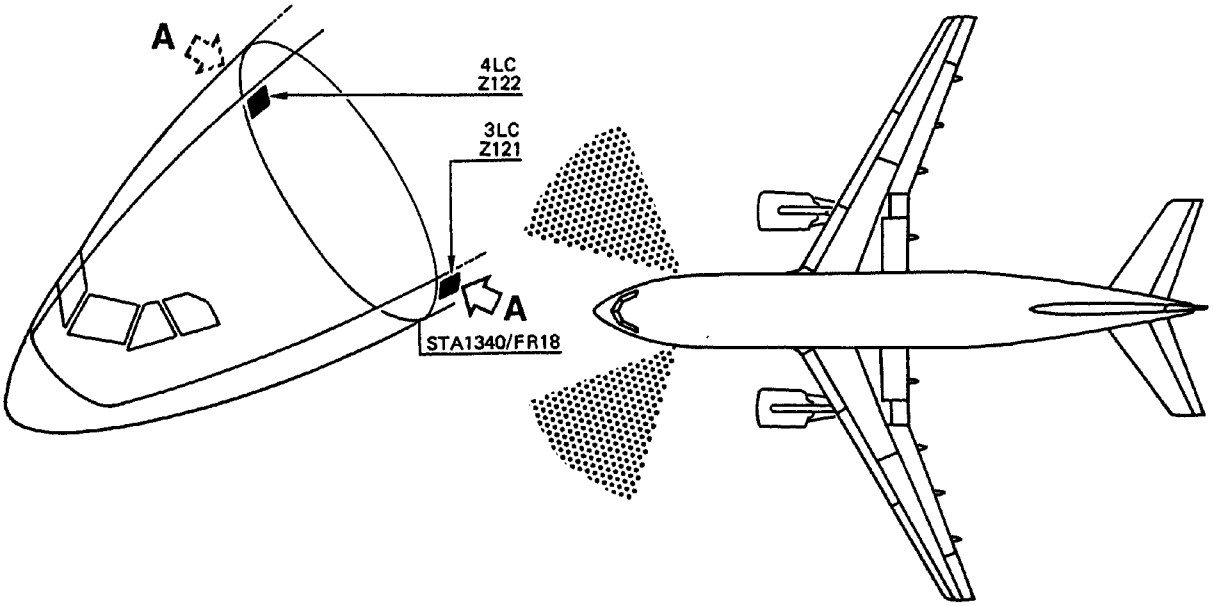
3. Description

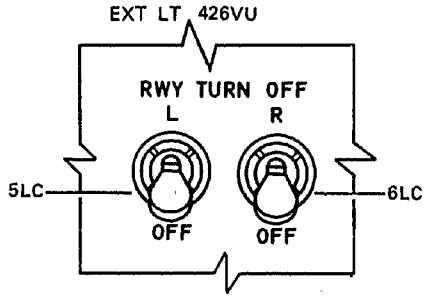
A. The runway turnoff lighting system comprises:
- two fixed position lights, installed in the LH and RH forward fuselage between STA1340(FR18) and STA1393(FR19). Each light contains a stepdown transformer, which reduces the voltage to 13 V AC.
- toggle switches 5LC and 6LC, installed on panel 426VU, control the 115 V AC supply to the LH and RH circuits respectively.

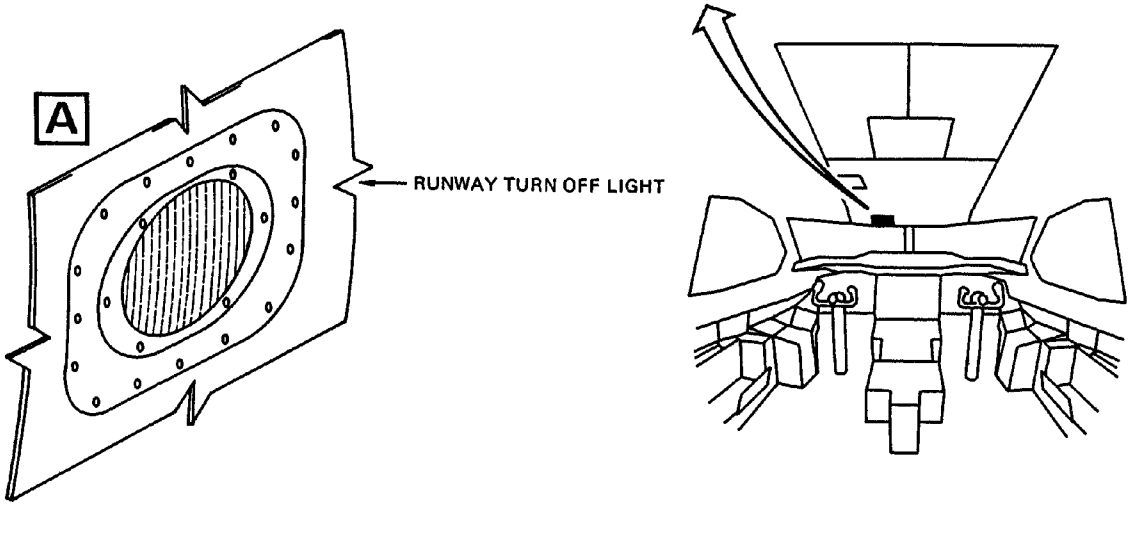
B. The system is supplied with 115 V AC from busbars 103XP and 202XP via circuit breakers TURN OFF/L (1LC) and TURN OFF/R (2LC). The circuit breakers used are the monitory type. A corresponding annunciator labeled OPEN illuminates when a circuit breaker is open and the busbar energized.

4. Operation (Ref. Fig. 002)

When the busbars are energized and the circuit breakers are closed, 115 V AC is supplied to the toggle switches. Placing the switches RWY TURN OFF (5LC, 6LC) on panel 426VU in position L and R, 115 V AC is supplied to the stepdown transformers. The transformers reduce the voltage to 13 V AC to illuminate the lights.







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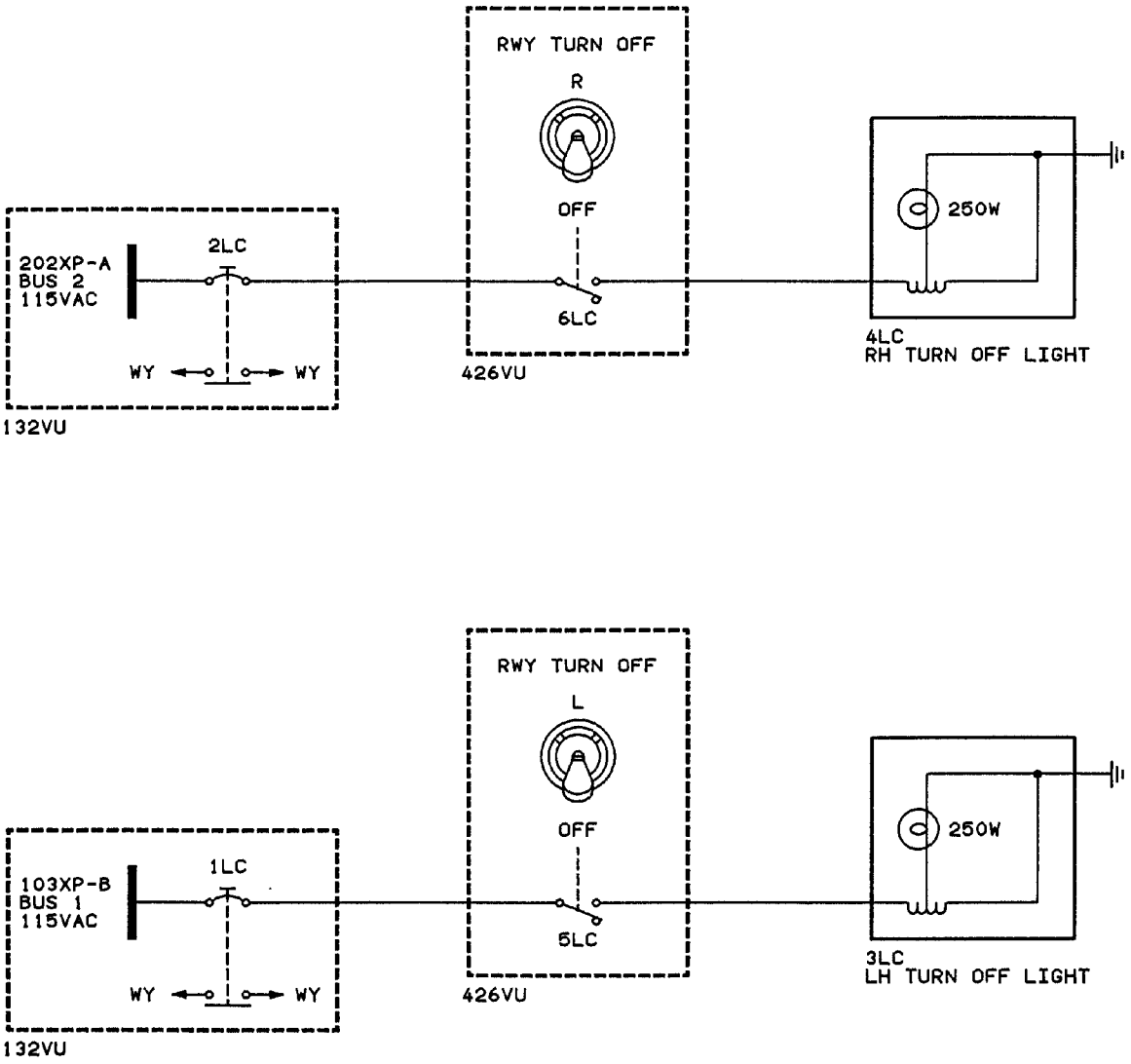
Component Location
Figure 001



WY = 31-69-00 CIRCUIT BREAKER MONITORING SYSTEM

B M 6 33 43 00 0 ACN0 00

Runway Turnoff Lights - Schematic
Figure 002

1. Operational Test

A. Reason for the Job
Operational test of runway turnoff lights

B. Equipment and Materials

ITEM	DESIGNATION
(1)	Electrical Ground Power Unit - 3-Phase, 115/200 V, 400 Hz

Referenced Procedure

- 24-41-00, P. Block 301	AC External Power Control

C. Procedure
(1)Job Set-Up
(a)Connect electrical ground power unit and energize aircraft electrical network (Ref. 24-41-00, P. Block 301).
(b)Make certain that electronic racks ventilation is correct.
(c)Make certain that the following circuit breakers are closed:

PANEL	SERVICE	IDENT.	LOCATION
132VU	LIGHTING-EXTERIOR LT-TURN OFF L	1LC	N74
132VU	LIGHTING-EXTERIOR LT-TURN OFF R	2LC	M75

(2)Test

ACTION	RESULT
1. External light control panel 426VU: - place LH toggle switch RWY TURN OFF (5LC) in L position. - place LH toggle switch RWY TURN OFF (5LC) in OFF position.	Zone 121: - LH runway turnoff light (3LC) comes on. - LH runway turnoff light (3LC) goes off.
2. External light control panel 426VU: - place RH toggle switch RWY TURN OFF (6LC) in R position. - place RH toggle switch RWY TURN OFF (6LC) in OFF position.	Zone 122: - RH runway turnoff light (4LC) comes on. - RH runway turnoff light (4LC) goes off.

(3)Close-up
(a)De-energize aircraft electrical network and disconnect ground power unit (Ref. 24-41-00, P. Block 301).

WARNING : BEFORE POWER IS SUPPLIED TO THE AIRCRAFT, MAKE CERTAIN THAT ELECTRICAL CIRCUITS UPON WHICH WORK IS IN PROGRESS ARE ISOLATED.

R WARNING : ISOPROPYL-ALCOHOL (MATERIAL NO. 11-010) IS DANGEROUS. AVOID INHALING FUMES. USE IN WELL VENTILATED AREA ONLY.

R ISOPROPYL-ALCOHOL (MATERIAL NO. 11-010) IS HIGHLY FLAMMABLE.

R ISOPROPYL-ALCOHOL (MATERIAL NO. 11-010) IS A SKIN IRRITANT. WEAR PROTECTIVE GLOVES OR USE A BARRIER CREAM. WASH IMMEDIATELY WITH CLEAN WATER IF SKIN IS SPLASHED WITH SOLVENT.

1. Reason for the Job
Replacement of sealed beam unit.

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 2.6 m (8.5 ft.)
B.	Circuit Breaker Safety Clips and Tags
R C. Material No. 11-010	Cleaning Agents (Ref. 20-31-00)

Referenced Procedure

- 24-41-00, P. Block 301	AC External Power Control

3. Procedure
(Ref. Fig. 301)

A. Job Set-Up
(1)Position access platform.
(2)Open, safety and tag the following circuit breakers:

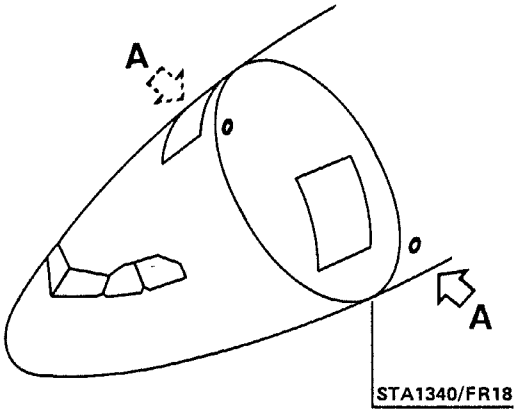
PANEL	SERVICE	IDENT.	LOCATION
132VU	TURN OFF/L	1LC	322/N74
132VU	TURN OFF/R	2LC	323/M75

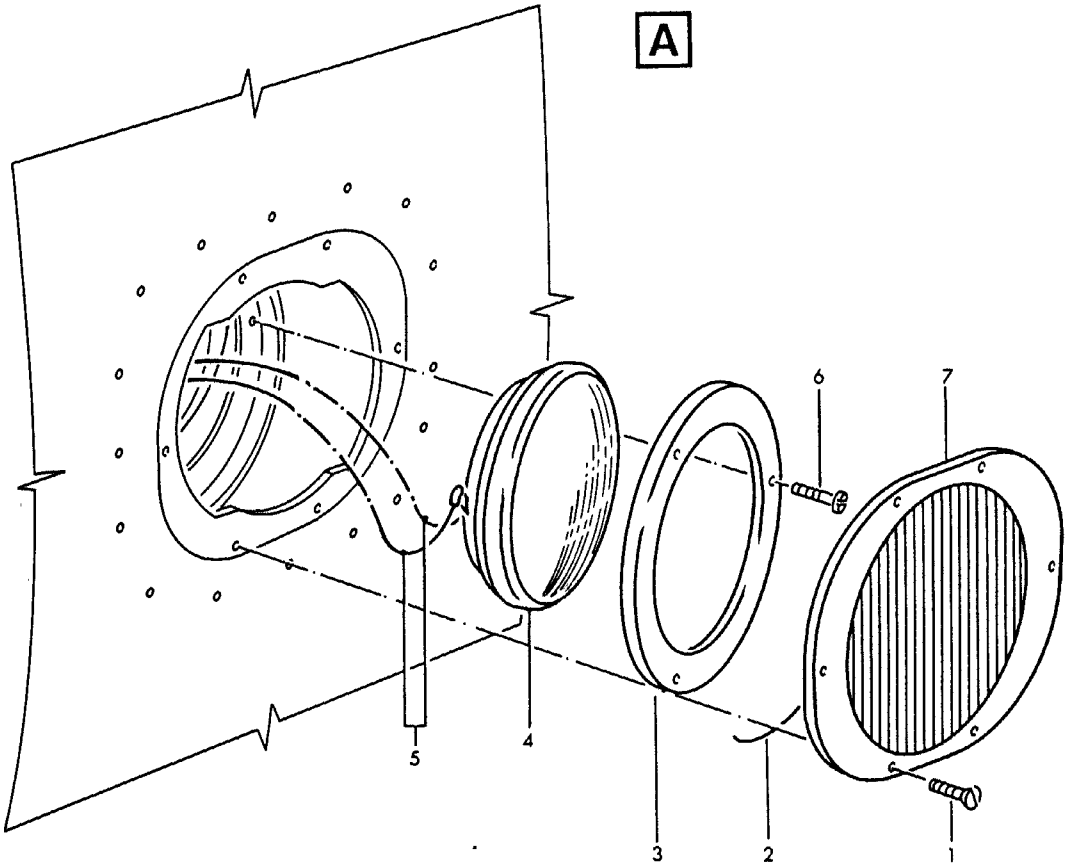
(3)Set toggle switches 5LC and 6LC to OFF position.

B. Removal
(1)Remove screws (1) and cover plate assembly (7) and allow cover plate to hang by retaining strap (2).
(2)Remove screws (6) and clamp (3).
(3)Withdraw sealed beam unit (4), sufficiently to disconnect electrical connectors (5).
(4)Remove sealed beam unit (4).
(5)Install blanking caps.

C. Preparation for Installation

R WARNING : ISOPROPYL-ALCOHOL (MATERIAL NO. 11-010) IS DANGEROUS.





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Runway Turnoff Light
Figure 301

R (1)Clean parts with a cloth moist with isopropyl alcohol
R (Material No. 11-010).
R Clean the autotransformer assy, the connector assy, the lamp housing
R and the name plate with low pressure compressed air only.
R Fully clean the lamp terminals and remove corrosion from the lugs
R with emery cloth.

(2)Make certain that drain hole is not blocked.

D. Installation
(1)Remove blanking caps.
(2)Connect electrical connectors (5) to sealed beam unit (4).
(3)Position sealed beam unit (4) in structure and install clamp (3) using screws (6).
(4)Install cover plate assembly (7) using screws (1).

NOTE : Make certain that cover plate assembly (7) is correctly oriented. The cover plate assembly is marked AFT. For LH turnoff light AFT must be on the RH side of the cover plate assembly and opposite for RH installation.

(5)Apply sealant PR-1436-GA1/2 (Material No. 09-013) to joint round the cover plate.
(6)Make sure that the drain hole stays clear of sealant.

E. Test
(1)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(2)Remove safety clips and tags and close circuit breakers 1LC and 2LC.

ACTION	RESULT
1. External light control panel 426VU: - place LH toggle switch RWY TURN OFF 5LC in L position - place LH toggle switch RWY TURN OFF in OFF position.	Zone 121: - LH runway turnoff light 3LC comes on - LH runway turnoff light 3LC goes off.
2. External light control panel 426VU: - place RH toggle switch RWY TURN OFF 6LC in R position - place RH toggle switch RWY TURN OFF in OFF position.	Zone 122: - RH runway turnoff light 4LC comes on - RH runway turnoff light 4LC goes off.

F. Close-Up
(1)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(2)Remove access platform.
(3)De-energize the aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).

RUNWAY TURNOFF LIGHT - REMOVAL/INSTALLATION

WARNING : BEFORE POWER IS SUPPLIED TO THE AIRCRAFT, MAKE CERTAIN THAT ELECTRICAL CIRCUITS UPON WHICH WORK IS IN PROGRESS ARE ISOLATED.

WARNING : METHYL-ETHYL-KETONE (MATERIAL NO. 11-003) IS DANGEROUS. AVOID INHALING FUMES. USE IN WELL VENTILATED AREA ONLY.
METHYL-ETHYL-KETONE (MATERIAL NO. 11-003) IS HIGHLY FLAMMABLE.
METHYL-ETHYL-KETONE (MATERIAL NO. 11-003) IS A SKIN IRRITANT. WEAR PROTECTIVE GLOVES OR USE A BARRIER CREAM. WASH IMMEDIATELY WITH CLEAN WATER IF SKIN IS SPLASHED WITH SOLVENT.

1. Reason for the Job
Replacement of runway turnoff light.

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 2.6 m (8.5 ft.)
B.	Circuit Breaker Safety Clips and Tags
C. Material No. 09-013	Sealants (Ref. 20-31-00)
D. Material No. 11-003	Cleaning Agents (Ref. 20-31-00)
R E.	Non-metallic Scraper

Referenced Procedures

- 24-41-00, P. Block 301	AC External Power Control
- 25-71-12, P. Block 401	Heat and Sound Insulation
- 33-43-11, P. Block 301	Runway Turnoff Light

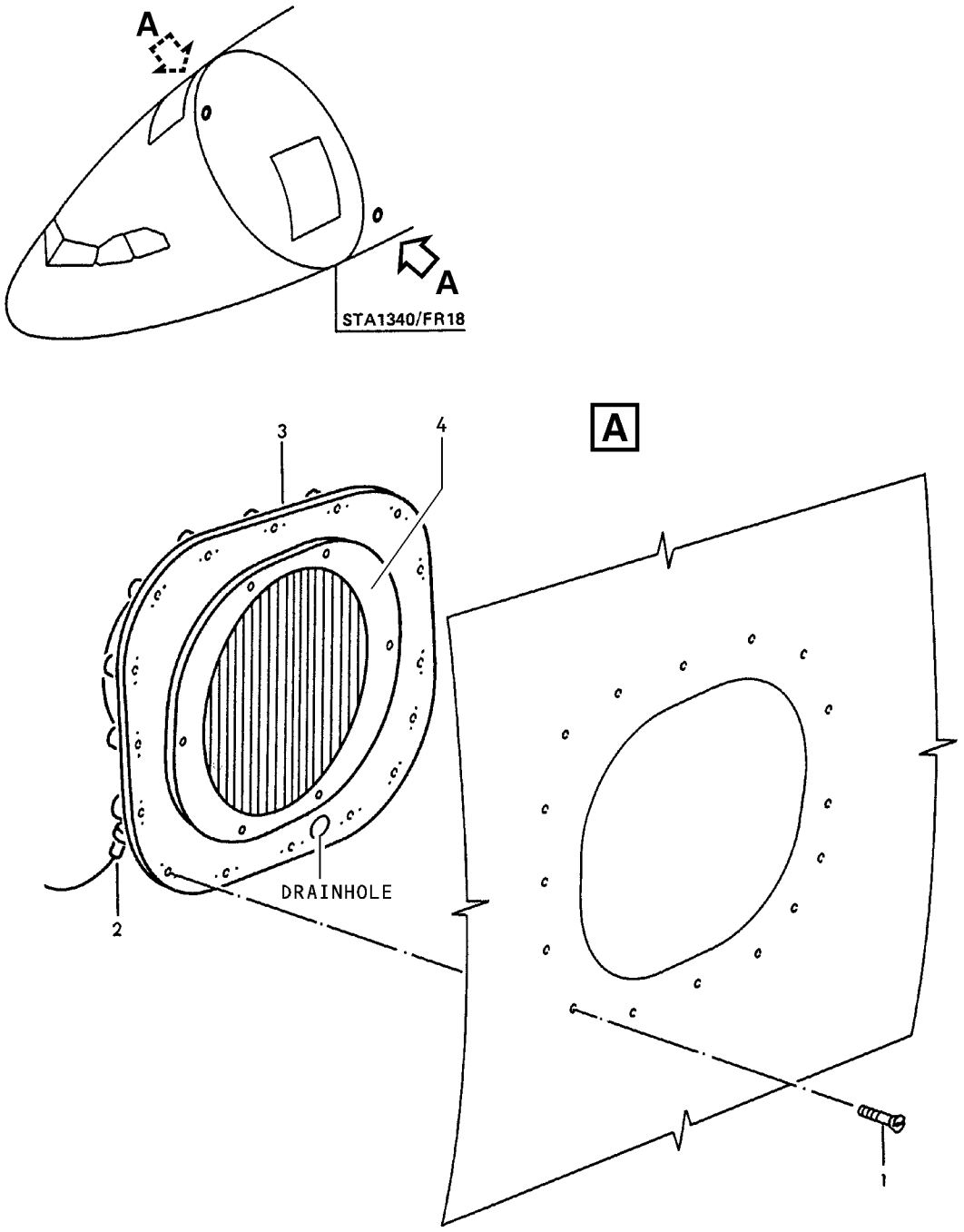
3. Procedure
(Ref. Fig. 401)

A. Job Set-Up
(1)Position access platform.
(2)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
132VU	TURN OFF/L	1LC	322/N74
132VU	TURN OFF/R	2LC	323/M75

(3)Set toggle switches 5LC and 6LC to OFF position.
(4)Gain access to avionics compartment via access door 121BL or via forward compartment and access door 131AZ/132AZ.
(5)Remove insulation blanket between STA1340/F and STA1393/F LH or RH (Ref. 25-71-12, P. Block 401).

B. Removal
R (1)Remove sealant around cover plate (4) using a non-metallic scraper.
(2)Remove and retain screws (1).
(3)Disconnect electrical connectors (2).



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Runway Turnoff Light - Removal/Installation
Figure 401

R

(4)Remove turnoff light (3) from structure.
(5)Install blanking caps.

C. Preparation for Installation

WARNING : METHYL-ETHYL-KETONE (MAT. NO. 11-003) IS DANGEROUS.

(1)Remove old sealant (Material No. 09-013) from aircraft structure using cleaning agent (Material No. 11-003).

CAUTION : CARE MUST BE EXERCISED WHEN APPLYING SEALANT (MATERIAL NO. 09-013) TO ENSURE THAT THE TURNOFF LIGHT DRAIN HOLE IS NOT BLOCKED.

(2)Apply sealant (Material No. 09-013) to flange of turnoff light (3) and mating surface of structure.

D. Installation
(1)Position turnoff light (3) and install screws (1).
(2)Remove caps and connect electrical connectors (2) to turnoff light (3).

NOTE : Make certain that cover plate of the runway turnoff light is correctly oriented (Ref. 33-43-11, P. Block 301).

R (3)Apply sealant (Material No. 09-013) to joint of cover plate (4) and structure (Ref. 51-23-00, P. Block 1 (SRM).
(4)Make sure that the drain hole stays clear of sealant.

E. Test
(1)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(2)Remove safety clips and tags and close circuit breakers 1LC and 2LC.

ACTION	RESULT
1. External light control panel 426VU: - place LH toggle switch RWY TURN OFF 5LC in L position - place LH toggle switch RWY TURN OFF in OFF position	Zone 121: - LH runway turnoff light 3LC comes on - LH runway turnoff light 3LC goes off
2. External light control panel 426VU: - place RH toggle switch RWY TURN OFF 6LC in R position - place RH toggle switch RWY TURN OFF in OFF position	Zone 122 - RH runway turnoff light 4LC comes on - RH runway turnoff light 4LC goes off

F. Close-Up
(1)Install insulation blanket (Ref. 25-71-12, P. Block 401).
(2)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(3)Close door and remove access platform.

(4)De-energize the aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).

TAXI AND TAKEOFF LIGHTS - DESCRIPTION AND OPERATION

1. General

The taxi and takeoff lighting is provided by two dual 600/400 W filament lights. The lights illuminate the center area of the runway.

2. Component Location

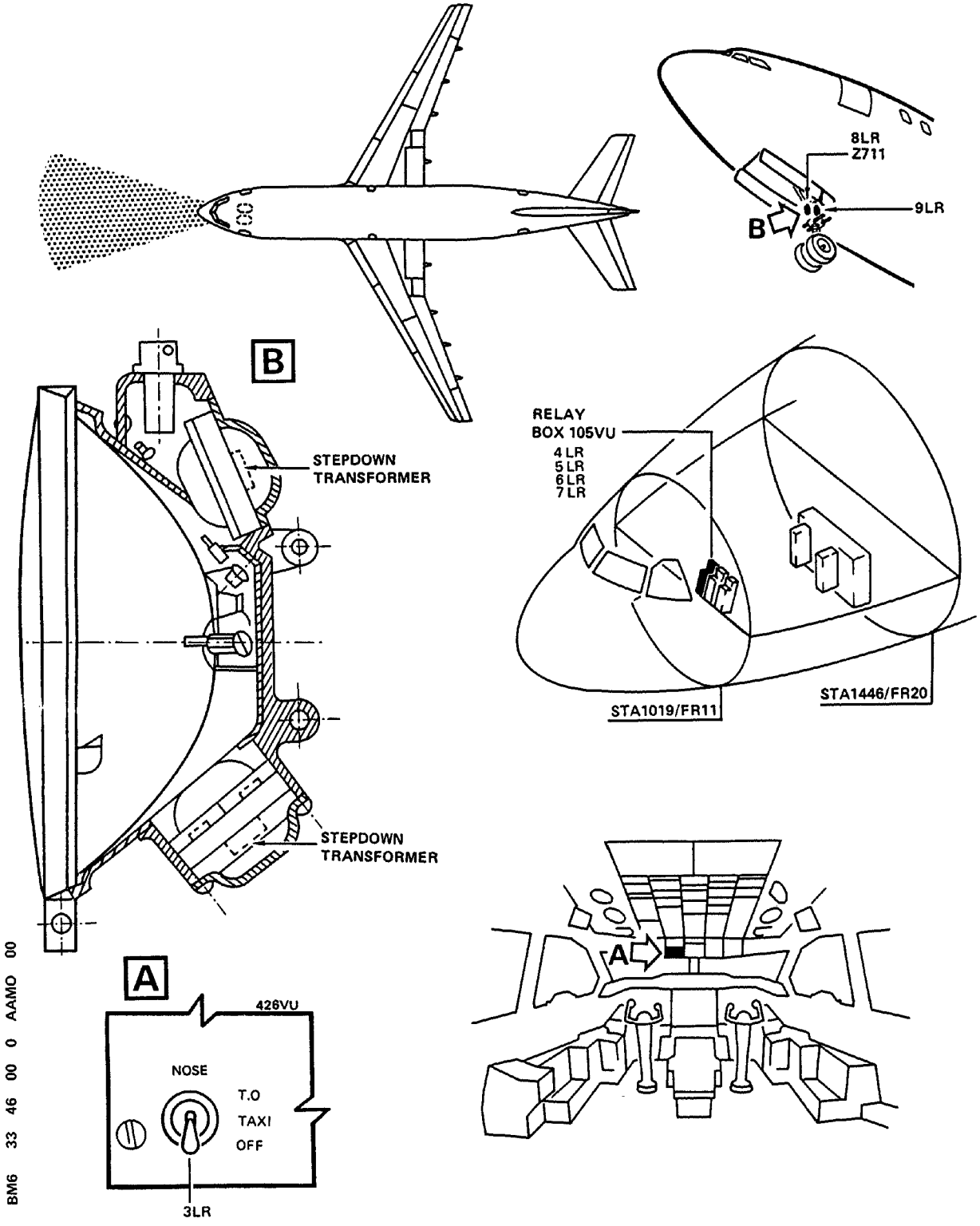
(Ref. Fig. 001)

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF.
3LR	SWITCH NOSE	426VU	211		
4LR	RELAY	105VU	122		
5LR	RELAY	105VU	122		
6LR	RELAY	105VU	122		
7LR	RELAY	105VU	122		
8LR	TAXI AND TAKEOFF LIGHT		711		33-46-12
9LR	TAXI AND TAKEOFF LIGHT		711		33-46-12

3. Description

A. The taxi and takeoff lighting system comprises:
- two fixed-position, dual-filament lights (8LR and 9LR) installed on the nose landing gear. The 400 W filament is used for taxiing and both the 400 W and 600 W filaments for takeoff.
- two step-down transformers fitted to each light.
- toggle switch NOSE (3LR), installed on panel 426VU, controls the lighting. The switch positions are identified TO, TAXI and OFF.
- power relays (4LR, 5LR, 6LR and 7LR).

B. The system is supplied with 115V AC from busbars 202XP-B and 202XP-C via circuit breakers TAXI & TO/L/SUPPLY (1LR) and TAXI & TO/R/SUPPLY (2LR). 28V DC is supplied by busbar 101PP via circuit breaker TAXI & TO/CTL (10LR). The circuit breakers used are the monitoring type. A corresponding annunciator, labelled OPEN, goes on when a circuit breaker is open and the busbar energized. The lights go on only when the nose landing gear is extended.

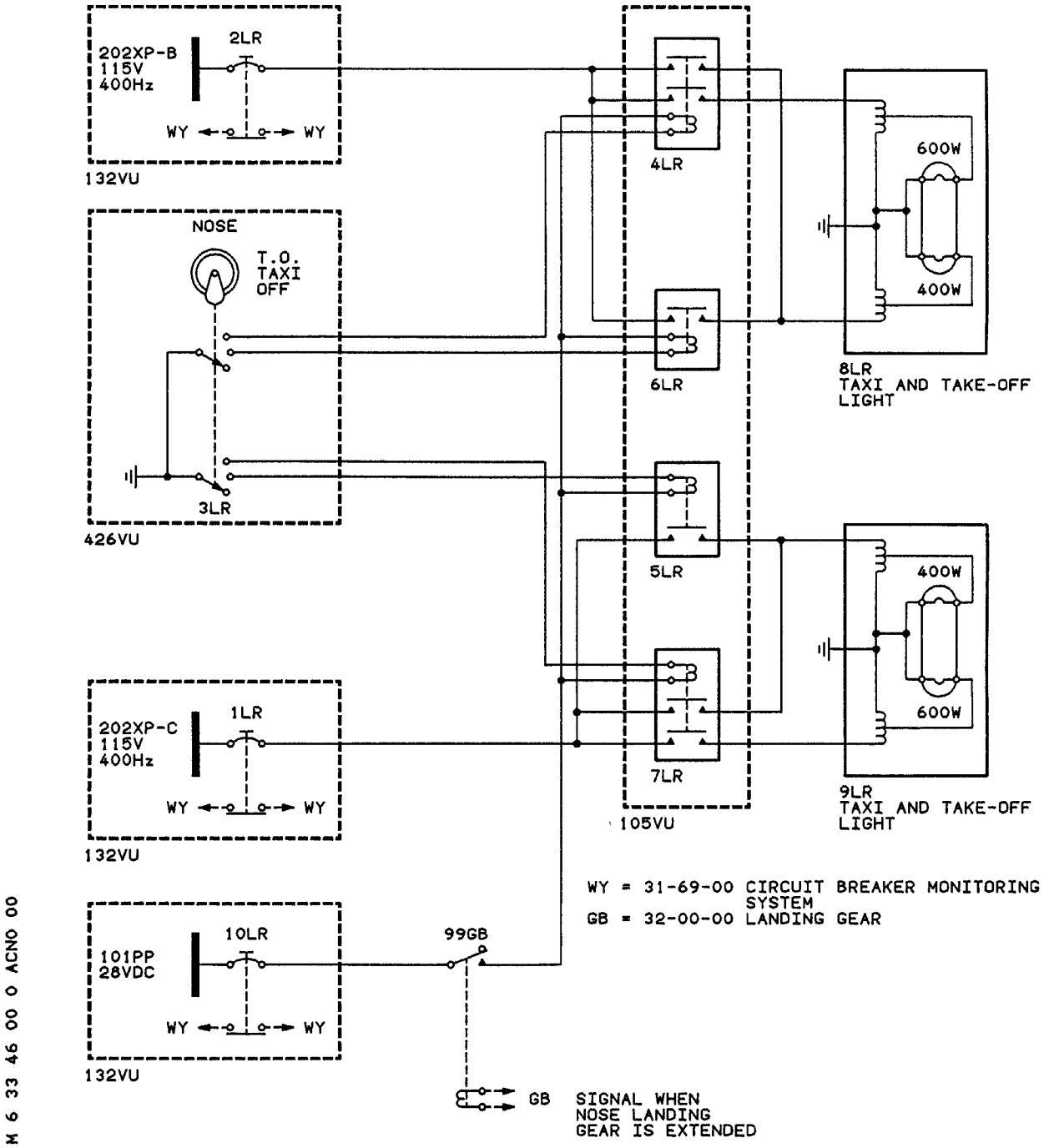


Component Locations
Figure 001

4. Operation (Ref. Fig. 002)

A. When the busbars are energized and the circuit breakers closed, 115V AC is supplied to the power relays and 28V DC is supplied to the nose landing gear relay 99GB. 28V DC is supplied to the power relay coils when the nose landing gear is extended.

B. Placing the switch NOSE in the TAXI position energizes power relays 5LR and 6LR. The relays supply 115V AC to the step-down transformers of the 400 W filaments in the lights. The step-down transformers reduce the voltage to 28V DC to illuminate the 400 W filaments for taxiing.
In the TO position the switch NOSE causes the power relays 4LR and 7LR to be energized. The relays supply 115V AC to the step-down transformers of the 600 W and 400 W filaments in the light. The step-down transformers reduce the voltage to 28V AC to illuminate the 600 W and 400 W filaments for takeoff.



Taxi and Takeoff Lights - Schematic
Figure 002

TAXI AND TAKEOFF LIGHTS - ADJUSTMENT/TEST

CAUTION : LIGHT OPERATIONAL CYCLE IN TAKEOFF POSITION: ON TIME, 5 MIN. - OFF TIME, 45 MIN.

1. Operational Test

A. Reason for the Job
Operational test of taxi and takeoff lights.

B. Equipment and Materials

ITEM	DESIGNATION
(1)	Electrical Ground Power Unit - 3-Phase, 115/200 V, 400 Hz
Referenced Procedure - 24-41-00, P. Block 301	AC External Power Control

C. Procedure
(1)Job Set-Up
(a)Connect electrical ground power unit and energize aircraft electrical network (Ref. 24-41-00, P. Block 301).
(b)Make certain that electronic racks ventilation is correct.
(c)Make certain that the following circuit breakers are closed:

PANEL	SERVICE	IDENT.	LOCATION
132VU	LIGHTING-EXTERIOR LT-TAXI AND T.O L SUPPLY	1LR	M81
132VU	LIGHTING-EXTERIOR LT-TAXI AND T.O R SUPPLY	2LR	M80
132VU	LIGHTING-EXTERIOR LT-TAXI AND T.O CTL	10LR	P75
133VU	HYD-L/G PROX DET/RELAYS SYS 2 GEAR DN/OVHD POS IND	83GB	V51

(2)Test

CAUTION : LIGHT OPERATIONAL CYCLE IN TAKEOFF POSITION: ON TIME, 5 MIN. - OFF TIME, 45 MIN.

ACTION	RESULT
1. External light control panel 426VU: - place toggle switch NOSE (3LR) in position TAXI.	Zone 711: - the 400 W filament of lights 8LR and 9LR come on.
- place toggle switch NOSE (3LR) in position TO.	- the 400 W filaments remain on and the 600 W filaments of both lights come on.
- place toggle switch NOSE (3LR) in position OFF.	- both lights go off.

(3)Close-Up
(a)De-energize aircraft electrical network and disconnect ground power

unit (Ref. 24-41-00, P. Block 301).

TAXI AND TAKEOFF LIGHTS (8LR, 9LR) - SERVICING

1. Reason for the Job

A. Removal/Installation of a nose gear taxi and takeoff light lamp (8LR, 9LR).

2. Equipment and Materials

	ITEM	DESIGNATION
	A.	Circuit Breaker Safety Clips
R	B.	Emery Cloth
R	C. Material No. 09-001	Sealants (Ref. 20-31-00)
R	D. Material No. 11-004B	Cleaning Agents (Ref. 20-31-00)
R	E. Material No. 19-003	Miscellaneous (Ref. 20-31-00)
	Referenced Procedure - 24-41-00, P. Block 301	AC External Power Control

3. Procedure

(Ref. Fig. 301)

A. Job Set-Up

(1)Open, safety and tag the following circuit breakers :

PANEL	SERVICE	IDENT.	LOCATION
132VU	LIGHTING/EXT LT/TAXI & TO/L/SUPPLY	1LR	323/M81
132VU	LIGHTING/EXT LT/TAXI & TO/R/SUPPLY	2LR	323/M80
132VU	LIGHTING/EXT LT/TAXI & TO/CTL	10LR	321/P75

B. Removal

CAUTION : WEAR GLASSES AND PROTECTIVE CLOTHING WHEN YOU WORK ON THE LIGHT.
THE HALOGEN CYCLE LAMP IS PRESSURIZED AND MAY EXPLODE.

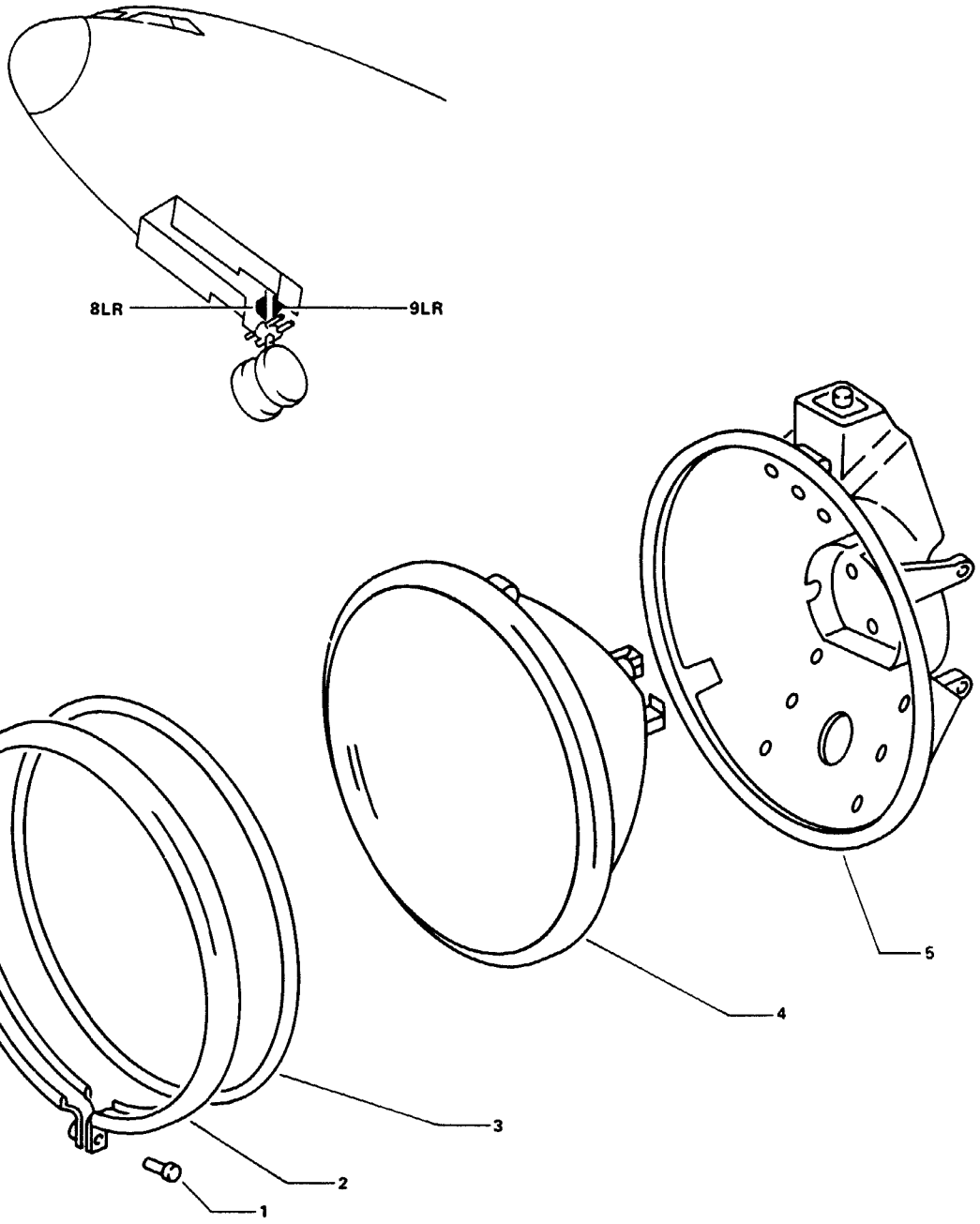
(1)Remove screws (1).
(2)Remove collar (2) and gasket (3).
(3)Remove lamp (4) from receptacle (5).

R C. Preparation of Replacement Component

(1)Check that lamp glass is not cracked and shows no sign of damage.

R D. Preparation for Installation

R WARNING : USE SOLVENTS/CLEANING AGENTS, SEALANTS AND OTHER SPECIAL
R MATERIALS ONLY WITH A GOOD FLOW OF AIR THROUGH THE WORK
R AREA.
R THESE MATERIALS ARE POISONOUS AND FLAMMABLE AND SKIN
R IRRITANT.
R OBEY THE MANUFACTURERS INSTRUCTIONS.
R PUT ON PROTECTIVE CLOTHING.
R DO NOT GET THEM IN YOUR MOUTH.
R DO NOT SMOKE.



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Taxi and Takeoff Light - Component Location
Figure 301

R DO NOT BREATHE THE GAS.
R GET MEDICAL HELP IF YOUR SKIN OR EYES BECOME IRRITATED.
R CAUTION : USE ONLY THE SPECIFIED MATERIALS OR THEIR EQUIVALENTS, AND
R OBEY THE INSTRUCTIONS FROM THE MANUFACTURERS. OTHER MATERIALS
R CAN CAUSE DAMAGE TO THE SURFACE PROTECTION OF THE COMPONENTS
R AND THE RELATED AREA.
R (1)Clean the screw (1), the collar (2), the gasket (3) and the lamp (4) (except electrical terminals) with a lint-free cloth (Material No. 19-003) made moist with chlorothene (Material No. 11-004B).
R (2)Clean the electrical terminals of the lamp and remove the corrosion from the lugs with an emery cloth.
R (3)Clean the receptacle (5) with low-pressure compressed air only.

R E. Installation
CAUTION : WEAR GLASSES AND PROTECTIVE CLOTHING WHEN YOU WORK ON THE LIGHT.
THE HALOGEN CYCLE LAMP IS PRESSURIZED AND MAY EXPLODE.
(1)Install lamp (4) in receptacle (5).
(2)Install collar (2) and gasket (3).
(3)Tighten collar screw (1).

R F. Test
(1)Connect interphone to nose gear leg interphone jack.
(2)Initial conditions
- correct electrical power supply
- forward services ventilation system in operation.
(3)Remove safety clips and tags and close circuit breakers 1LR, 2LR and 10LR.
CAUTION : LIGHT OPERATIONAL CYCLE : 5 MIN. ILLUMINATION (MAX.) FOLLOWED BY 45 MIN. EXTINCTION (MINIMUM).
(4)On EXT LT section of panel 426VU, place NOSE switch 3LR in TAXI position. The 400W linear filament comes on.
(5)On EXT LT section of panel 426VU, place NOSE switch 3LR in TO position. The linear and the circular filament come on.
(6)On EXT LT section of panel 426VU, place NOSE switch 3LR in OFF position.

R G. Close-Up
(1)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(2)De-energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(3)Disconnect service interphone.

LIGHT (8LR, 9LR) - REMOVAL/INSTALLATION

1. Reason for the Job
Removal/Installation of a nose gear taxi and takeoff light (8LR, 9LR).

2. Equipment and Materials

ITEM	DESIGNATION
A.	Circuit Breaker Safety Clips
B. Material No. 09-001	Sealants (Ref. 20-31-00)
Referenced Procedure - 24-41-00, P. Block 301	AC External Power Control

3. Procedure
(Ref. Fig. 401)

A. Job Set-Up
(1)Open, safety and tag the following circuit breakers :

PANEL	SERVICE	IDENT.	LOCATION
132VU	LIGHTING/TAXI & TO/L/SUPPLY	1LR	323/M81
132VU	LIGHTING/TAXI & TO/R/SUPPLY	2LR	323/M80
132VU	LIGHTING/TAXI & TO/CTL	10LR	321/P75

B. Removal

R CAUTION : WEAR GLASSES AND PROTECTIVE CLOTHING WHEN YOU WORK ON THE
R LIGHT.
R THE HALOGEN CYCLE LAMP IS PRESSURIZED AND MAY EXPLODE.

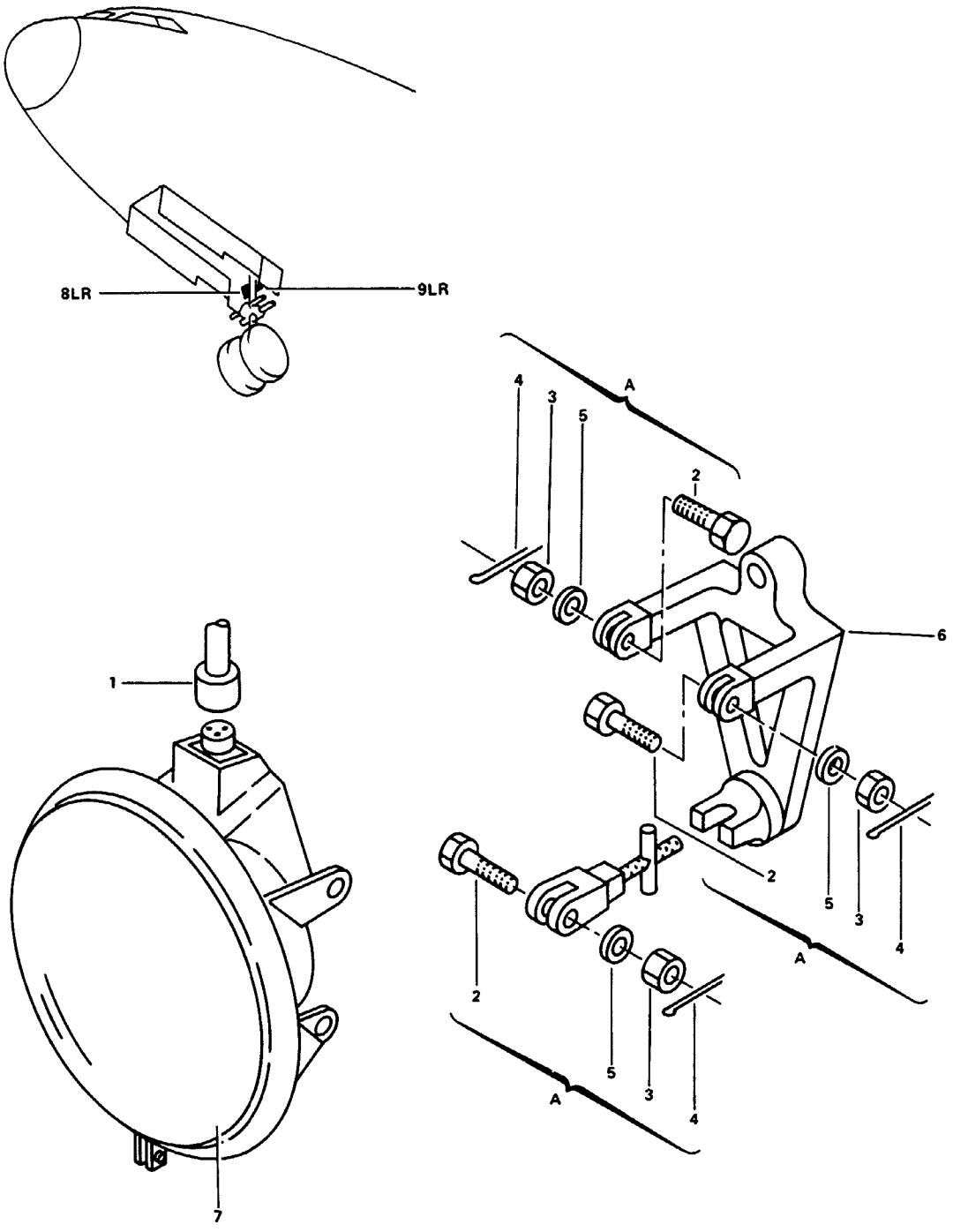
(1)Disconnect electrical connector (1).
(2)Remove rubber caps (A) from screw heads (2) and nuts (3).
(3)Remove cotter pins (4).
(4)Remove nuts (3).
(5)Remove washers (5).
(6)Remove screws (2).
(7)Remove light (7) from support (6).

C. Preparation of Replacement Component
(1)Check that the two filaments of the light are in good condition.
(2)Check that lamp reflector does not show signs of damage.
(3)Check that lamp glass is free from scratches.
(4)Check that light collar is correctly tightened.

D. Installation

R CAUTION : WEAR GLASSES AND PROTECTIVE CLOTHING WHEN YOU WORK ON THE
R LIGHT.
R THE HALOGEN CYCLE LAMP IS PRESSURIZED AND MAY EXPLODE.

(1)Install light (7) in support (6).
(2)Install screws (2).
(3)Install washers (5).



Taxi and Take off Light - Component Location
Figure 401

(4)Tighten nuts (3).
(5)Install cotter pins (4).
(6)Install rubber caps (A) on screw heads and nuts using Material No.09-001.
(7)Connect wire and lock connector (1).

E. Test
(1)Connect service interphone to nose gear leg interphone jack.
(2)Initial Conditions
- correct electrical power supply
- forward services ventilation system in operation
(3)Remove safety clips and tags and close circuit breakers 1LR, 2LR and 10LR.
CAUTION : LIGHT OPERATIONAL CYCLE : 5 MIN. ILLUMINATION (MAX.) FOLLOWED BY 45 MIN. EXTINCTION (MINIMUM).
(4)On EXT LT section of panel 426VU, place NOSE switch 3LR in TAXI position. The 400W linear filament comes on.
(5)On EXT LT section of panel 426VU, place NOSE switch 3LR in TO position. The linear and the circular filament come on.
(6)On EXT LT section of panel 426VU, place NOSE switch 3LR in OFF position.

F. Close-Up
(1)De-energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(2)Disconnect service interphone.

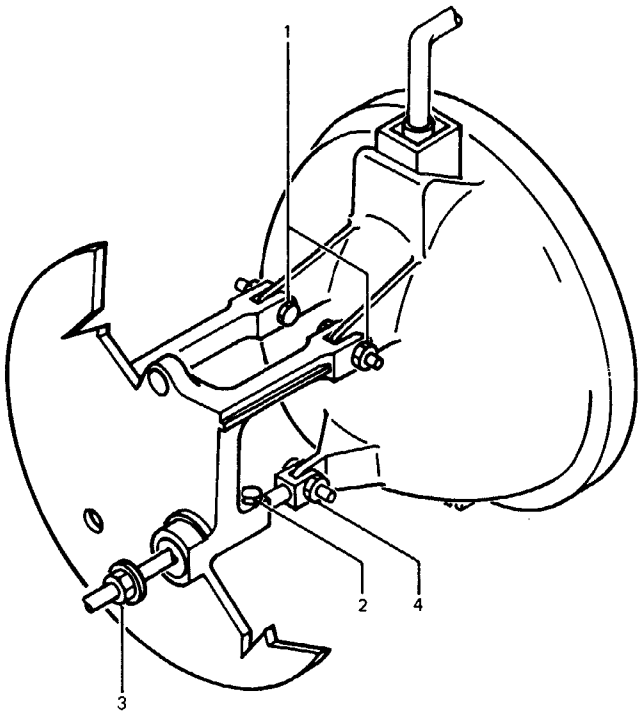
1. Adjustment

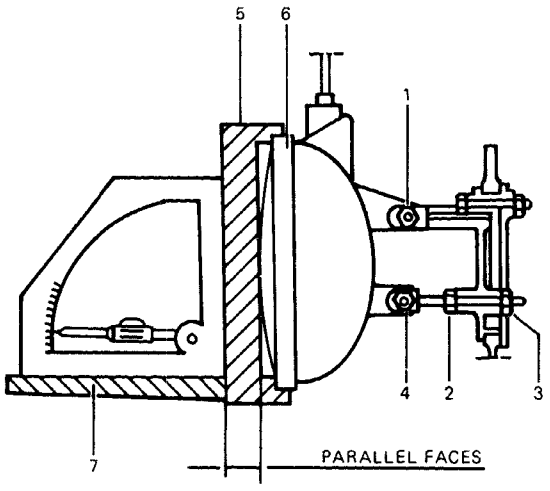
A. Reason for the Job
(1)To check correct adjustment of taxi and take off lights.

B. Equipment and Materials

ITEM	DESIGNATION
(1)	Access Platform 2.00 m (6 ft. 7 in.)
(2)98A33403502000	Setting Fixture - Landing and Taxiing Lights

C. Procedure
(Ref. Fig. 501)
(1)Job set-up
(a)Position 2.00 m (6 ft. 7 in.) access platform to lights.
(2)Adjustment
NOTE : Theoretical adjustment angle of light face is dipped 2° from vertical.
(a)Read angle of inclination of the aircraft (angle X°) at clinometer in flight compartment.
(b)Attach adjustment tool (5) and level (7) to retaining ring of light 9LR (8LR).
1 If angle read on clinometer 0°, light face shall be adjusted to dip 2° from vertical.
2 If the aircraft nose is dipped X° from horizontal, light face shall be adjusted to dip (2 + X°) from vertical.
3 If the aircraft nose is tilted up X° from horizontal, light face shall be adjusted to dip (2 - X° from vertical.
(c)If angle of inclination of light is not correct :
1 Slacken screws (1).
2 Back-off locknut (3).
3 Turn adjuster (2) in desired direction, in order to extend or retract adjustment rod (4).
4 Return adjuster (2) to housing and tighten locknut (3).
5 Tighten screws (1).
(3)Close-up
(a)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(b)Remove access platform.





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Adjustment
Figure 501

LOGO LIGHTS - DESCRIPTION AND OPERATION

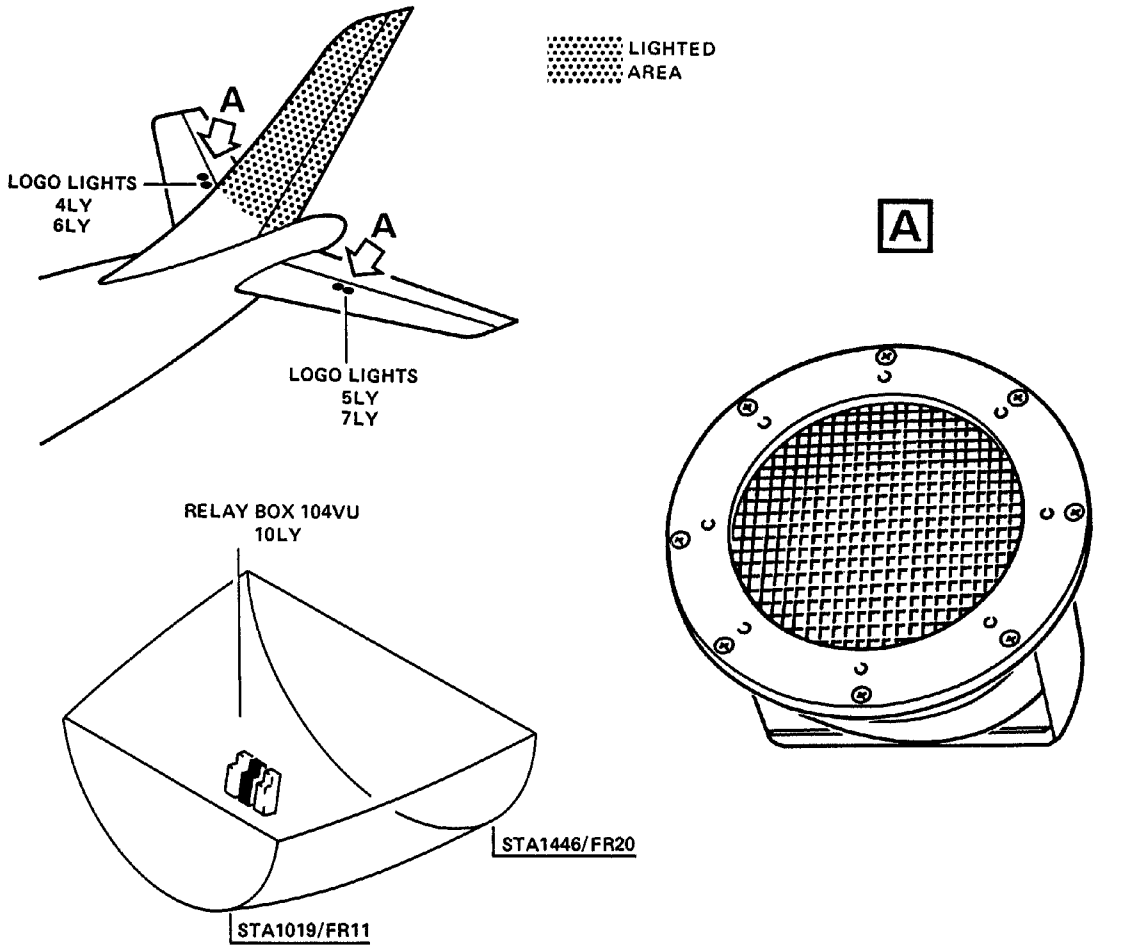
1. General

The logo lighting is provided by four 250 W filament lights. The lights illuminate the airline emblem.

2. Component Location

(Ref. Fig. 001)

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF.
2LA	SWITCH NAV & LOGO	426VU	211		
4LY	LIGHT LOGO		343		
5LY	LIGHT LOGO		333		
6LY	LIGHT LOGO		343		
7LY	LIGHT LOGO		333		
10LY	RELAY	104VU	120		



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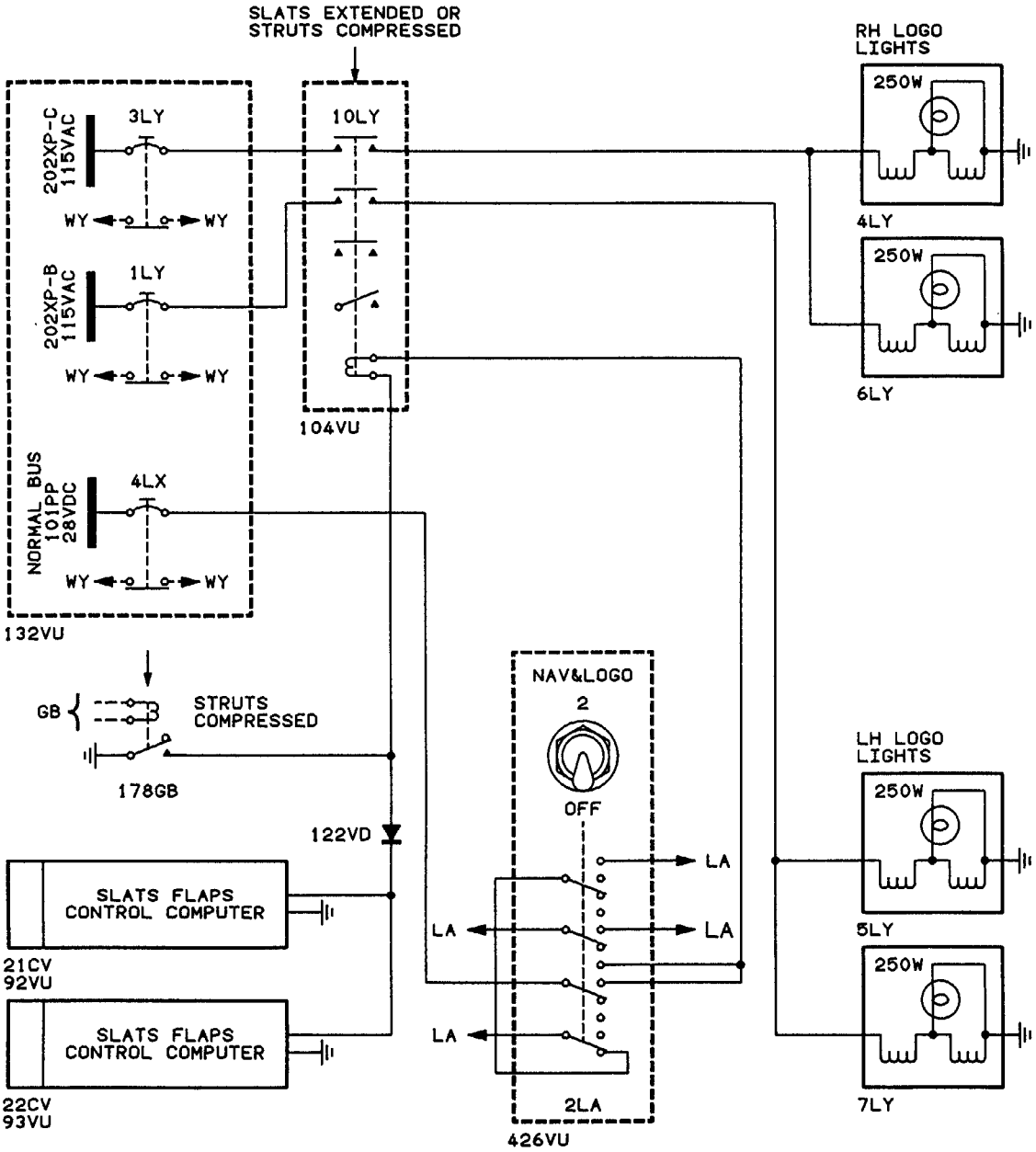
Component Locations
Figure 001

3. Description

A. The logo lighting system comprises:
- four fixed position lights installed in the LH and RH horizontal stabilizers (zones 333 and 343).
  Each light contains a stepdown transformer, which reduces the voltage to 13 V AC.
- toggle switch NAV & LOGO (2LA), installed on panel 426VU, controls the 28 V DC supply to the power relay (10LY).

B. The system is supplied by 115 V AC from the busbars 202XP-B and 202XP-C via circuit breakers LOGO/L (1LY) and LOGO/R (3LY).
28 V DC for control is supplied by busbar 101PP via circuit breaker ENG/R (4LX).
The circuit breakers used are of the monitory type. A corresponding annunciator labelled OPEN, illuminates when a circuit breaker is open and the busbar is energized.
The logo lights are controlled by the switch NAV & LOGO. The switch positions are identified 2, 1 and OFF. The lights are only illuminated when the landing gear struts are compressed or when the slats are extended.

4. Operation (Ref. Fig. 002)
When the busbars are energized and the circuit breakers closed, 115 V AC is supplied to the power relay (10LY) and 28 V DC to the toggle switch (2LA).
When the landing gear struts are compressed or the slats are extended, the power relay coil is grounded. Placing the switch in position 1 or 2 feeds 28 V DC to energize the power relay.
The relay supplies 115 V AC to the stepdown transformers which reduce the voltage to 13 V AC and the lights come on.



Logo Lights-Schematic
Figure 002

1. Operational Test

A. Reason for the Job
Operational test of logo lights

B. Equipment and Materials

ITEM	DESIGNATION
(1)	Electrical Ground Power Unit - 3-Phase, 115/200 V, 400 Hz
Referenced Procedure - 24-41-00, P. Block 301	AC External Power Control

C. Procedure
(1)Job Set-Up
(a)Connect electrical ground power unit, and energize aircraft electrical network (Ref. 24-41-00, P. Block 301).
(b)Make certain that electronic racks ventilation is correct.
(c)Make certain that the following circuit breakers are closed:

PANEL	SERVICE	IDENT.	LOCATION
132VU	LIGHTING - EXTERIOR LT - LOGO L	1LY	M79
132VU	LIGHTING - EXTERIOR LT - LOGO R	3LY	M82
132VU	LIGHTING - EXTERIOR LT - ENG R	4LX	P74
133VU	HYDRAULIC - L/G PROX DET AND RELAY 5 SYS 2 FLT/GND	1GB	V52

(2)Test

ACTION	RESULT
1. External light control panel 426VU:	Zone 333, 343:
- place toggle switch NAV & LOGO (2LA) in position 1.	- all logo lights come on.
- place toggle switch NAV & LOGO (2LA) in position 2.	- logo lights remain on.
- place toggle switch NAV & LOGO (2LA) in position OFF.	Zone 333, 343: - all logo lights go off.

(3)Close-Up
(a)De-energize aircraft electrical network and disconnect ground power unit (Ref. 24-41-00, P. Block 301).

WARNING : BEFORE POWER IS SUPPLIED TO THE AIRCRAFT, MAKE CERTAIN THAT ELECTRICAL CIRCUITS UPON WHICH WORK IS IN PROGRESS ARE ISOLATED.

1. Reasons for the Job

A. Replacement of light beam unit

B. Replacement of transformer

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform 7.6 m (25 ft.)
B.	Electrical Ground Power Unit - 3-Phase, 115/200 V, 400 Hz
C. Material No. 11-006	Cleaning Agents (Ref. 20-31-00)
Referenced Procedures	
- 24-41-00, P. Block 301	AC External Power Control

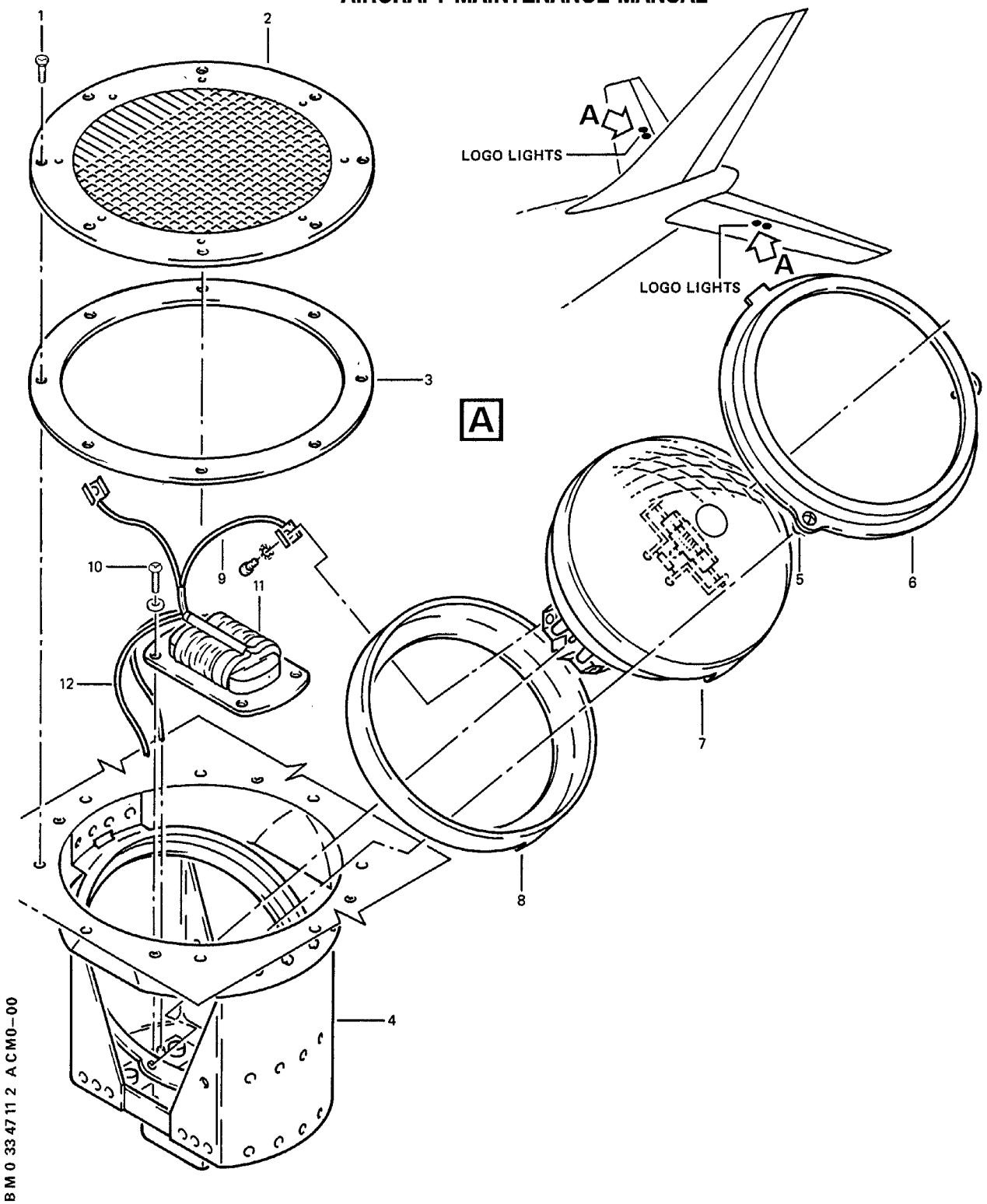
3. Procedure (Ref. Fig. 201)

A. Job Set-Up
(1)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
132VU	LOGO/L	1LY	M79
132VU	LOGO/R	3LY	M82
132VU	ENG/R	4LX	P74
133VU	FLT/GND	1GB	V52

(2)Position access platform.

B. Removal
(1)Light Beam Unit
(a)Remove screws (1), cover plate (2) and sealing ring (3) from lamp housing (4).
(b)Loosen quick-release screws (5) and remove ring (6).
(c)Remove light beam unit (7) with sealing ring (8) and disconnect electrical wires (9).



Logo Lights
Figure 201

(2)Transformer
(a)Remove screws (10) from lamp housing (4).
(b)Remove transformer (11) and disconnect electrical wires (12).

C. Preparation for Installation
(1)Clean all parts using cleaning agent (Mat. No. 11-006).

D. Installation
(1)Transformer
(a)Position transformer (11) and connect electrical wires (12).
(b)Install screws (10) into lamp housing (4).
(2)Light Beam Unit
(a)Position light beam unit (7) with sealing ring (8) and connect electrical wires (9).
(b)Install ring (6) and secure with quick-release screws (5).
(c)Install cover plate (2) with sealing ring (3) on lamp housing (4) and secure with screws (1).

E. Test
(1)Connect electrical ground power unit and energize aircraft electrical network (Ref. 24-41-00, P. Block 301).
(2)Remove safety clips and tags and close circuit breakers 1LY, 3LY, 4LX, 1GB.

ACTION	RESULT
1. External light control panel 426VU:	
- place toggle switch NAV & LOGO in position 1.	- all logo lights come on.
- place toggle switch in position 2.	- all logo lights remain on.
- place toggle switch in position OFF.	- all logo lights go off.

F. Close-Up
(1)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(2)Remove access platform.
(3)De-energize the aircraft electrical network and disconnect ground power unit (Ref. 24-41-00, P. Block 301).

ANTICOLLISION LIGHTING - DESCRIPTION AND OPERATION

1. General

The anticollision lighting system is designed to provide flashing high intensity lighting to enable easy recognition of the aircraft so reducing the possiblity of collision. The lighting consists of forward-facing and aft-facing, wing tip mounted strobe lights and an upper and lower fuselage mounted beacon anticollision light.

2. Component Location

**ON A/C 101-200,

(Ref. Fig. 001)

**ON A/C 001-100,

(Ref. Fig. 002)

**ON A/C 101-200,

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF.
2LV	SWITCH BEACON	426VU	210		
3LV	POWER UNIT		244		
4LV	POWER UNIT		154		
6LV	BEACON LIGHT, LOWER		150		33-48-12
7LV	BEACON LIGHT, UPPER		240		33-48-11
8LV	WIRE HARNESS		150		
9LV	WIRE HARNESS		240		
13LV	STROBE LIGHT		531		33-41-33
14LV	STROBE LIGHT		631		33-41-33
15LV	STROBE LIGHT		531		33-41-33
16LV	STROBE LIGHT		631		33-41-33
25LV	SWITCH, STROBE	426VU	210		

**ON A/C 001-100,

FIN	FUNCTIONAL DESCRIPTION	PANEL	ZONE	ACCESS DOOR	ATA REF.
2LV	SWITCH-BEACON	426VU	211		
3LV	POWER UNIT-UPPER BEACON		240		
4LV	POWER UNIT-LOWER BEACON		160		
6LV	BEACON LIGHT-LOWER		160		33-48-12
7LV	BEACON LIGHT-UPPER		240		33-48-11
20LV	FLASHER TIMING UNIT		135		
21LV	CONTROL ASSEMBLY-LH		531		

FIN	FUNCTIONAL DESCRIPTION	PANEL	ZONE	ACCESS DOOR	ATA REF.
22LV	CONTROL ASSEMBLY-RH		631		
23LV	STROBE LIGHT-FORWARD-FACING LH		531		33-41-33
24LV	STROBE LIGHT-FORWARD-FACING RH		631		33-41-33
25LV	SWITCH-STROBE	426VU	211		33-41-33
26LV	STROBE LIGHT-FORWARD-FACING RH		631		33-41-33
28LV	STROBE LIGHT-AFT-FACING RH		631		33-41-33
29LV	STROBE LIGHT-FORWARD-FACING LH		531		33-41-33
31LV	STROBE LIGHT-AFT FACING LH		531		33-41-33

**ON A/C ALL

**ON A/C 101-200,

3. Description

A. System Description

The anticollision light system consists of two independent systems.

(1)Beacon Lights

The two beacon lights are non-rotating units which simultaneously flash an aviation red light at a rate of approximately 60 flashes per minute. Together the light units provide 360° of horizontal and 075° of vertical light distribution.

Each light unit receives its energy from a power unit, which also controls the rate of flashing.

(2)Strobe Lights

Two strobe lights are installed in each wing tip, one facing forward and one facing aft. Each unit flashes a white light at a rate of approximately 60 flashes per minute and provides a light distribution 120 degrees horizontally and 150 degrees vertically.

(3)Control and Power Supplies

(a)Power of 115V AC is taken from the 301XP busbar and is supplied, via respective circuit breaker and power unit, to the upper and lower beacon lights.

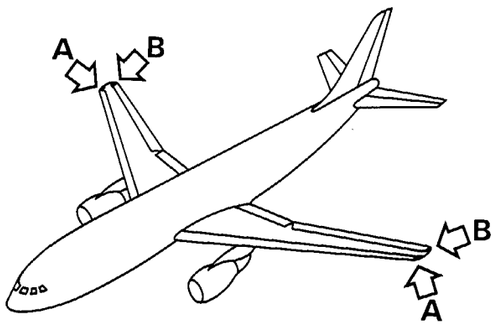
(b)Power for the strobe lights is supplied via respective circuit breaker from the 115V AC busbar 103XP.

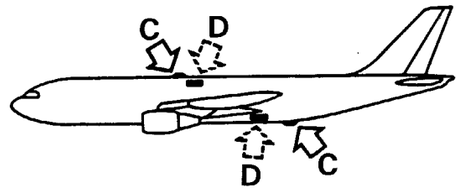
(c)The circuit breakers are installed on panel 132VU and contain auxiliary contacts which close when the circuit breaker is opened. The auxiliary contacts complete the supply for an annunciator which provides an indication that the circuit has been opened.

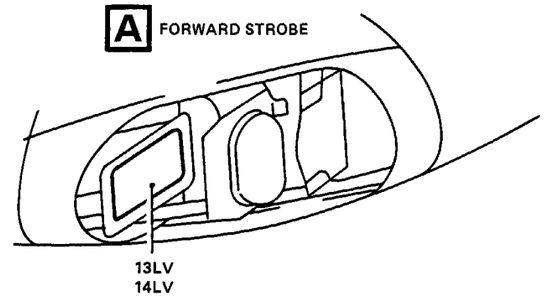
(d)The system control switches are installed on overhead panel 426VU and consist of a two-position BEACON switch (ON/OFF) and a three-position STROBE switch (ON/AUTO/OFF).

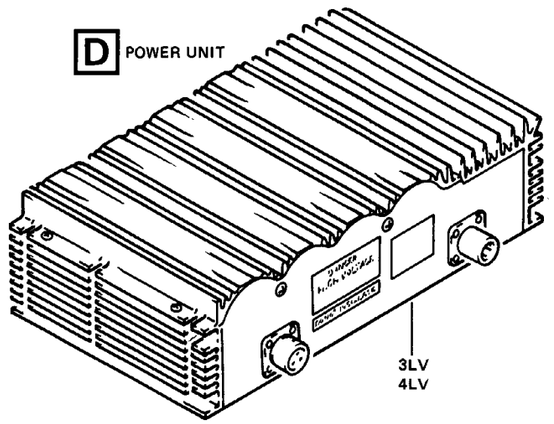
**ON A/C 001-100,

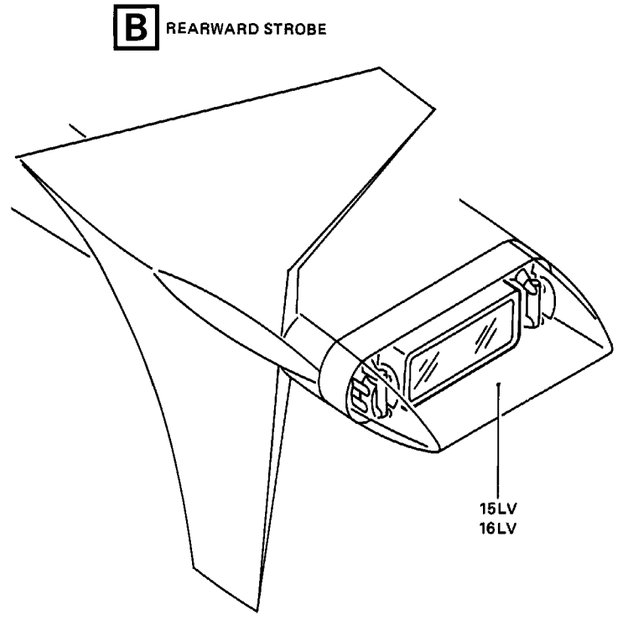
3. Description

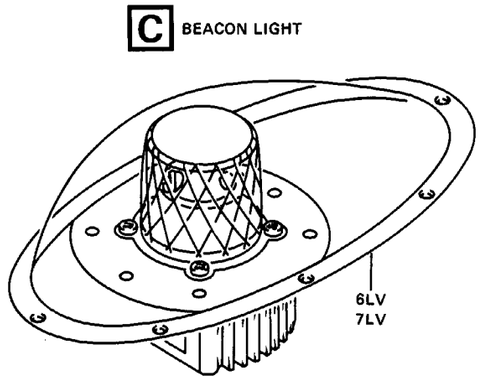


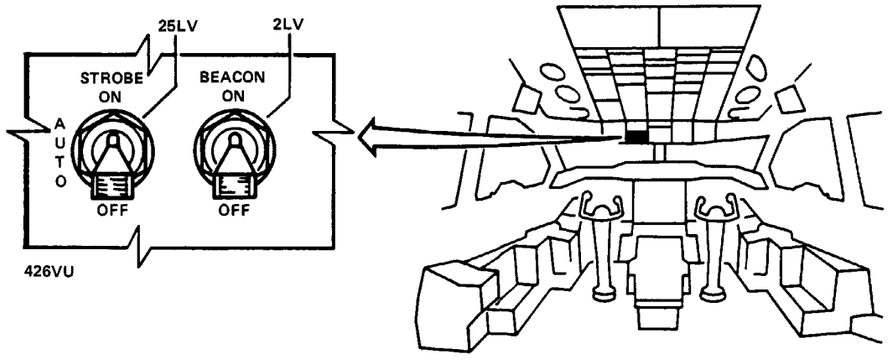






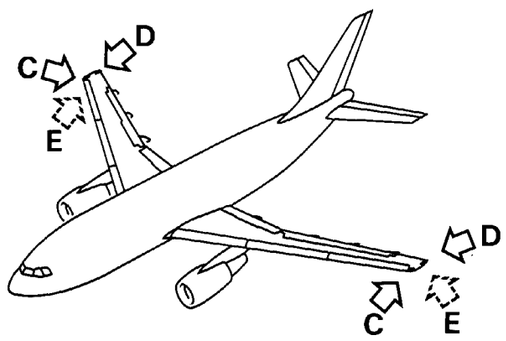


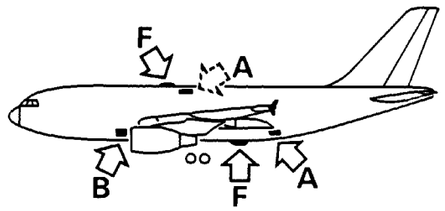


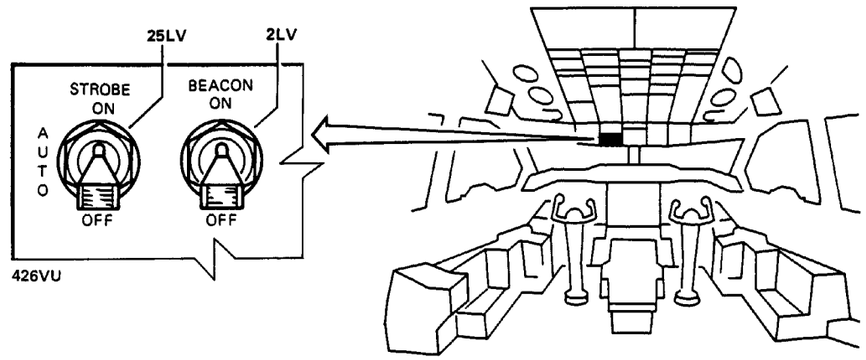


BM6 33 48 00 0 AASO 00

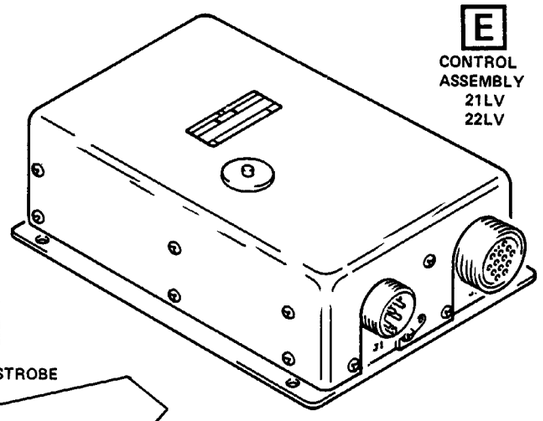
Component Locations
Figure 001



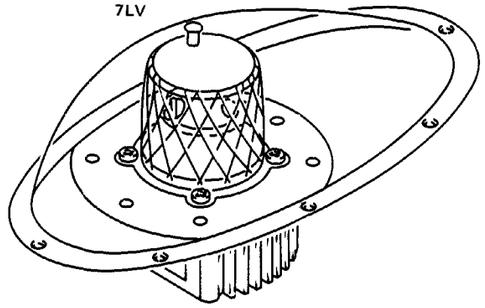




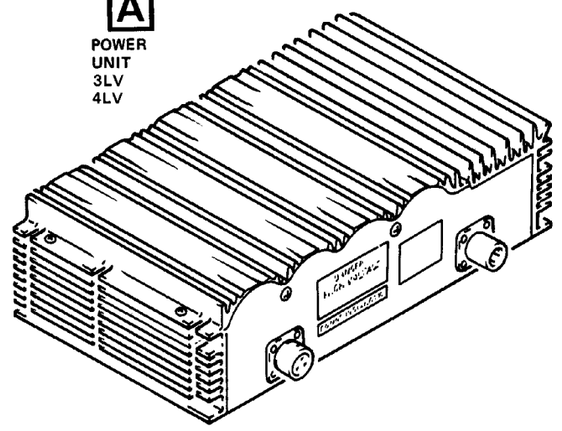
E
CONTROL ASSEMBLY
21LV
22LV



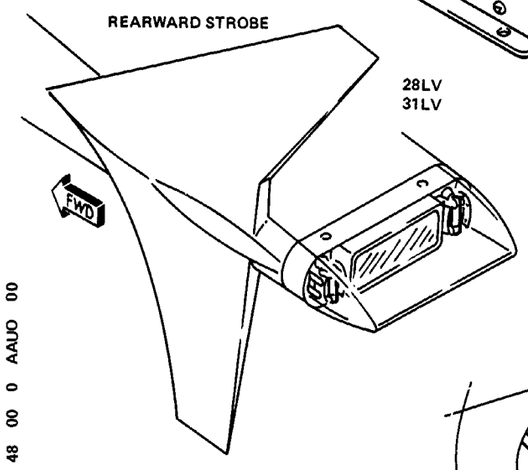
F
BEACON LIGHT
6LV
7LV



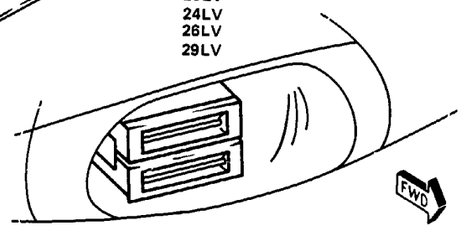
A
POWER UNIT
3LV
4LV



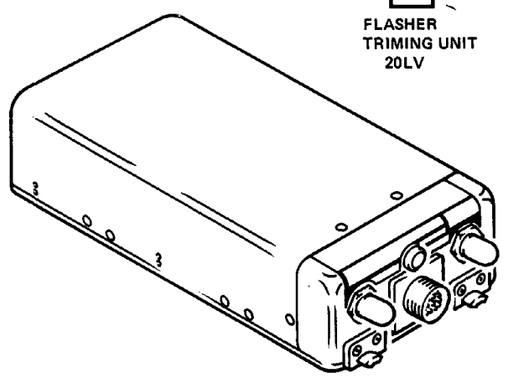
D
REARWARD STROBE
28LV
31LV



C
DOUBLE FLASH FORWARD STROBE
23LV
24LV
26LV
29LV



B
FLASHER TRIMING UNIT
20LV



BM6 33 48 00 0 AAUO 00

Component Locations
Figure 002

A. System Description

The anticollision light system consists of two independent subsystems which are designed to operate in synchronization.

(1)Beacon lights

The two beacon lights are non-rotating units which simultaneously flash an aviation red light at a rate of approximately 60 flashes per minute. Together the light units provide 360° of horizontal and 75° of vertical light distribution.

Each light unit receives it's energy from a power unit, which also controls the rate of flashing.

A flasher time unit (FTU) is used to supply the power unit with a 'chopped' 115V supply of 1 Hz per second, which enables the beacon lights to flash alternately in synchronism with the strobe lights. A failure in the supply to the FTU or in the circuitry will cause the beacon lights to flash in a 'free running' mode. The power units are self-monitoring and will flash automatically after a certain time since the last flash. The two power units are supplied from separate circuit breakers, a failure in one power source will have no effect on the other beacon light installation.

(2)Strobe Lights

Three strobe light units are installed in each wing tip, two forward facing and one aft facing. Each unit flashes a white light at a rate of approximately 60 flashes per minute and provides a light distribution of 60 degrees. The FTU supplies a 'chopped' 115V supply of 1 Hz per sec to a control assembly unit installed in each wing tip.

The control assembly produces three independent outputs consisting of a striking voltage and a trigger voltage for each unit. The outputs are identical except that one forward-facing strobe light unit is triggered a fraction of a second after the other. This produces 120 flashes per minute in the forward direction and 60 flashes per minute in the aft direction.

(3)Control and Power Supplies

(a)Power for the power units which supply the beacon lights is supplied via separate circuit breakers from 115V AC busbar 301XP.

(b)Power for the control assemblies which supply the strobe lights is supplied via a circuit breaker and the FTU from the 115V AC busbar 103XP.

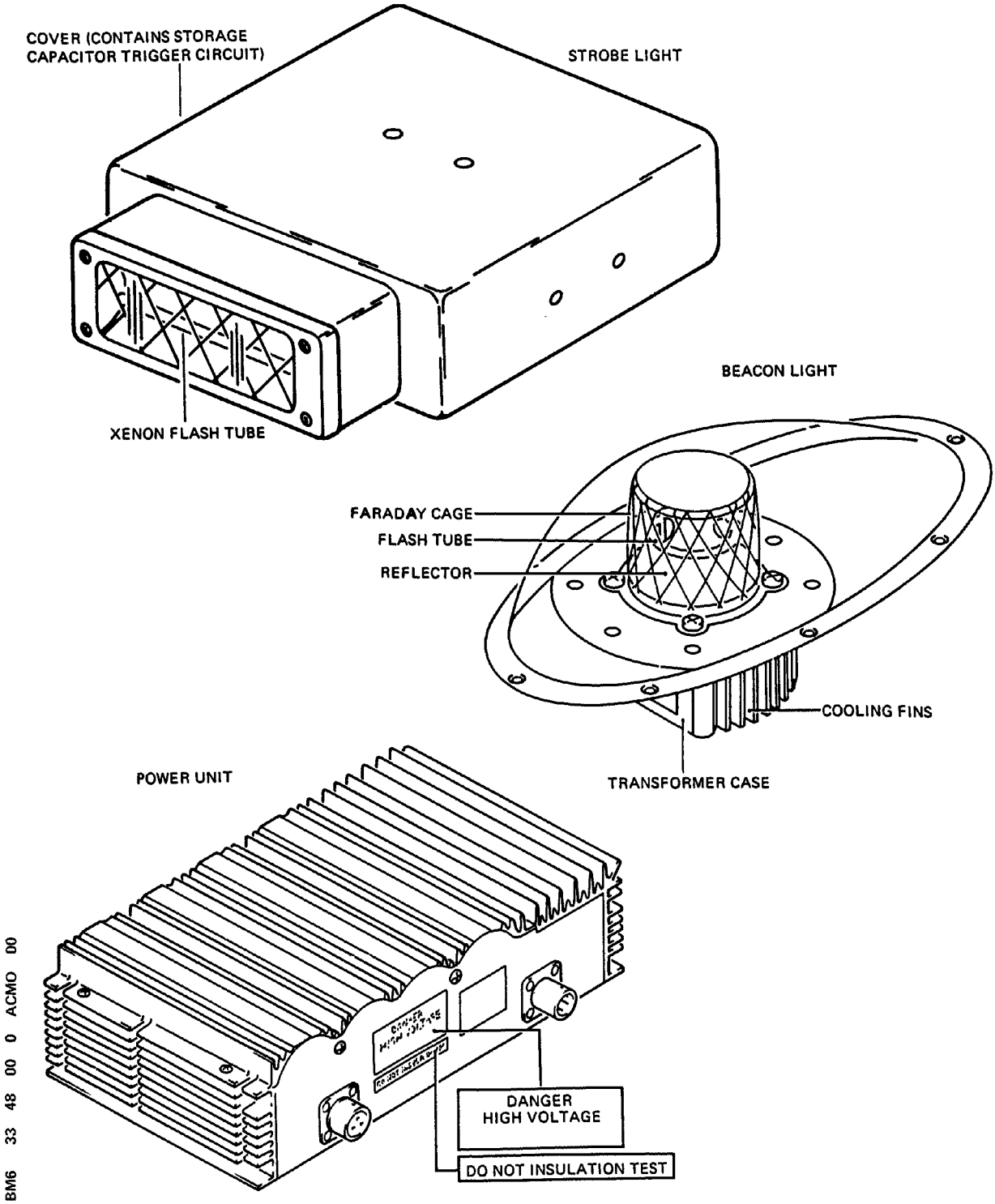
(c)The circuit breakers are installed on panel 132VU and contain auxiliary contacts which close when the circuit breaker is opened. The auxiliary contacts complete the supply for an annunciator which provides an indication that the circuit has been opened.

(d)The system control switches are installed on overhead panel 426VU and consist of a two-position BEACON switch ON/OFF and a three-position STROBE switch ON/AUTO/OFF.

(e)The system is designed to enable the strobe lights to be switched on automatically when the landing gear strut is unloaded.

R **ON A/C 101-200,

B. Component Description (Ref. Fig. 003)



BM6 33 48 00 0 ACMO D0

System Components
Figure 003

R

R **ON A/C 001-100,

B. Component Description (Ref. Fig. 004)

R **ON A/C 101-200,

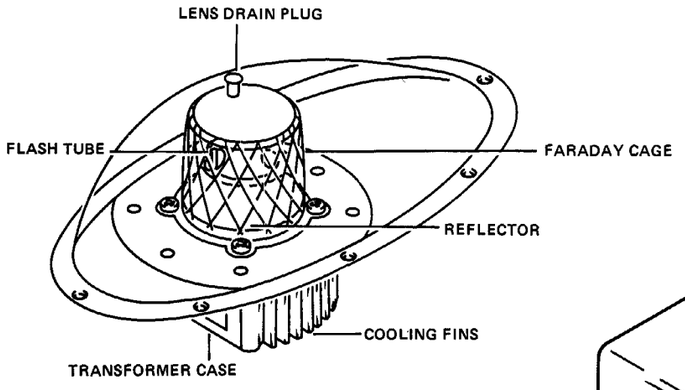
(1)Strobe Light
The strobe light consists of the following assemblies:
- EMC filter
- AC/DC converter
- clock generator
- arc blanking circuit
- voltage limiter
- blocking converter
- charging capacitor
- ignition impulse generator
- xenon flash tube

A symetrical LC-LC filter keeps the conducted and radiated interferences within the limited values. The AC/DC converter supplies DC voltages of different values to feed the individual assemblies. The clock generator determines the flash rate of the strobe light, and the arc blanking circuit serves to put the blocking converter after each flash temporarily out of operation. The voltage limiter limits the charging voltage of the flash capacitors, and the blocking converter reduces the DC voltage to approx. 140 V. The switching-in of the blocking converter is done by means of the feedback winding, this is maintained until the magnetic energy in the form of charging energy has been fully transferred to the charging capacitor. The flash energy is made available from the charging capacitor. The xenon flash tube is ionized with an attenuated high frequency-high voltage oscillation by the ignition impulse generator.

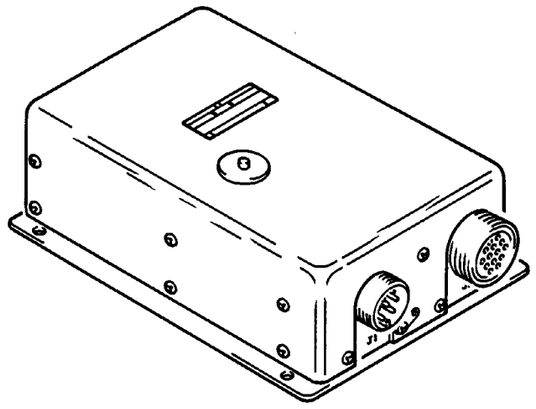
(2)Beacon Light
The beacon light consists of a flash tube mounted on a reflector, enclosed by a Faraday cage. All are installed on a mounting plate and covered by a glass lens. In the base of the light is a transformer which is mounted in a housing and provided with cooling fins. A starter electrode is provided to initiate ignition of the light unit.
The power for the light unit is provided by an associated energy box which provides between 400 V and 500V DC. This DC voltage is timed to produce a flashing rate of approximately 60 flashes per minute.

(3)Power Unit
The power unit is used to provide the high voltage necessary to operate a beacon light. It contains the following individual circuits:
(a)EMC filter - a symmetrical LC-LC filter which reduces the amount of interference being conducted to the power supply leads to an acceptable minimum.
(b)AC/DC converter - provides the various DC voltages used in the unit.
(c)Pulse generator - determines the flash rate of the associated light unit.
(d)Arc blanking - renders the blocking converter inoperative after each

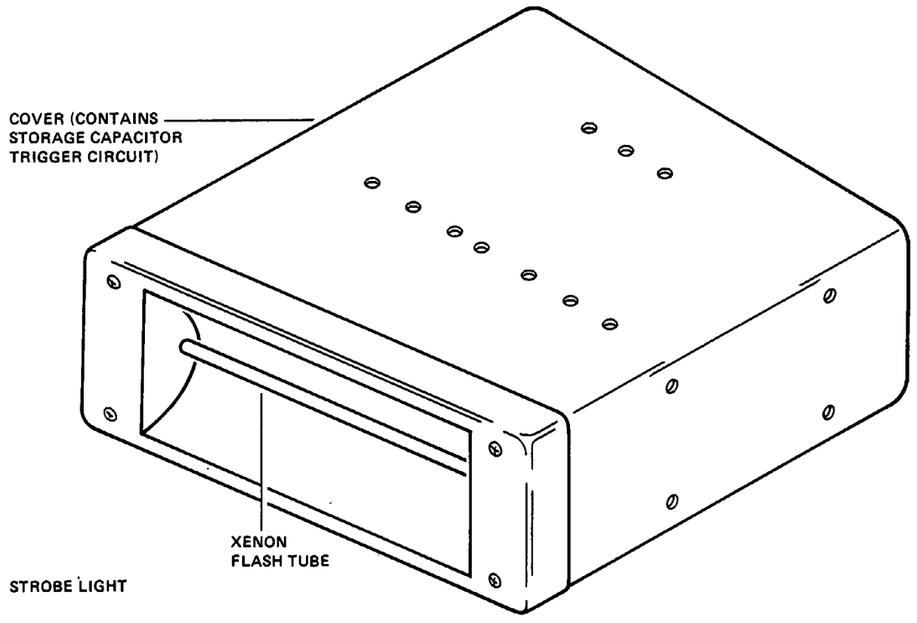
INTENTIONALLY BLANK



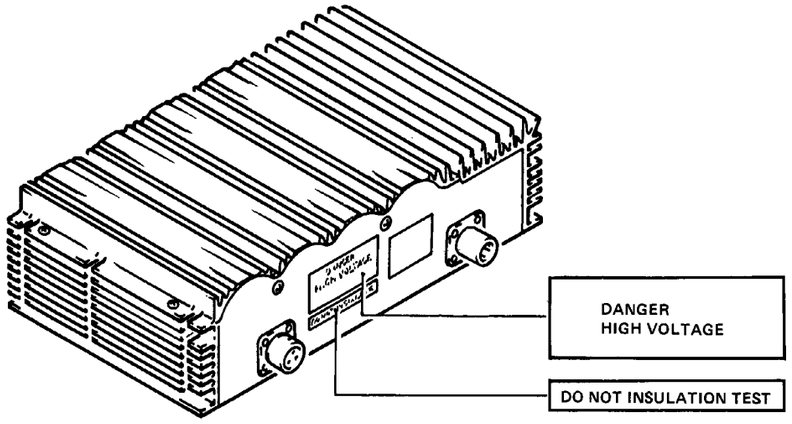
BEACON LIGHT



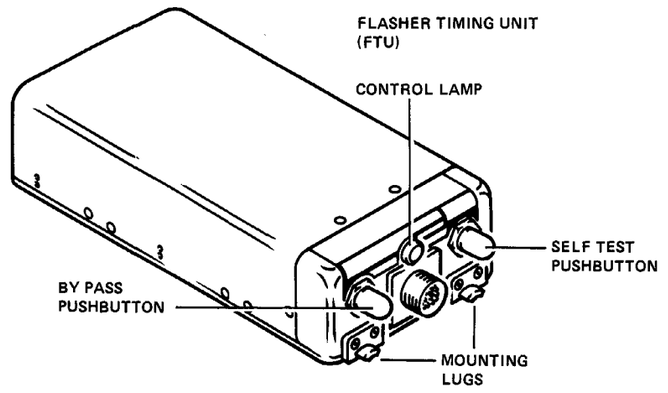
CONTROL ASSEMBLY



STROBE LIGHT



POWER UNIT



BM6 33 48 00 0 ACNO 00

System Components
Figure 004

flash, reducing the arc burning current of the associated light unit for complete arc suppression.

(e)Voltage limiter - limits the capacitor charging voltage to approx. 450 V and provides a discharge path when the output circuit is open.

(f)Blocking converter - chops the DC voltage, transforms it to a higher voltage and rectifies it for capacitor charging.

(g)Ignition impulse generator - produces an attenuated high frequency, high voltage oscillation, which is necessary for initiating ignition of the associated light unit.

(h)Electrolytic capacitors - four, connected in series-parallel, each with a nominal operating voltage of 250V DC.

R **ON A/C 001-100,

(1)Strobe Light

The strobe light consists of a xenon flash tube mounted in a metal case, one side of which has a transparent lens.

The unit also contains four energy storage capacitors which are progressively charged by pulsed DC (225V) from the control assembly unit. On application of the trigger voltage from control assembly, the capacitor rapidly discharges through the xenon tube producing a flash of white light.

The capacitor peak voltage is 'set' by bleed resistors which also act as a safety discharge path when power is turned off.

(2)Beacon Light

The beacon light consists of a flash tube mounted on a reflector and enclosed by a Faraday cage. All are installed on a mounting plate and are covered by a glass lens. In the base of the light is a transformer which is mounted in a housing and provided with cooling fins. A starter electrode is provided to initiate ignition of the light unit.

The power for the light unit is provided by an associated energy box which provides between 400 V and 500 V DC. This DC voltage is timed to produce a flashing rate of approximately 60 flashes per minute.

(3)Power Unit

The power unit provides high voltage necessary to operate the beacon light. It contains the following individual circuits:

(a)EMC Filter - a symmetrical LC-LC filter which reduces the interference being conducted to the power supply leads to an acceptable minimum.

(b)AC/DC Converter - provides the various DC voltages used in the unit.

(c)Control Logic - receives a 1 Hz voltage pulse from the FTU and adapts it to supply the pulse generator which enables the unit to synchronize the beacon light flash with the strobe light flash. When an AC voltage of 115 V 400 Hz is applied, the power unit adopts a 'free running' mode of operation.

(d)Pulse Generator - determines the flash rate of the associated light unit.

(e)Arc Blanking - renders the blocking converter inoperative after each flash, reducing the arc burning current, of the associated light unit, for complete arc suppression.

(f)Voltage Limiter - limits the capacitor charging voltage to approx. 450 V and provides a discharge path when the output circuit is open.

The voltage limit can be reduced by using an additional external earth so providing a 'dimming' function (15%).

(g)Blocking Converter - chops the DC voltage, transforms it to a higher voltage and rectifies it for capacitor charging.

(h)Ignition Impulse Generator - produces an attenuated high frequency high voltage oscillation, which is necessary for initiating ignition of the associated light unit.

(j)Electrolytic Capacitors - four, connected in series-parallel, each with a nominal operating voltage of 250V DC.

(4)Control Assembly

The control assembly is used to provide three independent outputs. Each output consists of a storage capacitor charging voltage and a flash tube trigger voltage. The unit contains the following circuits:

(a)EMC Filter - an R-C filter which reduces the amount of interference being conducted to the FTU to an acceptable minimum.

(b)Transformerless Voltage Quadrupler - utilizes capacitor current limiting. This form of power supply has the advantage of producing minimum magnetic interference. A short circuit cannot be reflected back to the aircraft power source.

(c)Trigger Circuits - provide the voltage to initiate the ignition of its associated light unit. Two identical circuits supply one forward and one aft-facing strobe light so producing simultaneous flashing. A third circuit, whose output is delayed by a fraction of a second, supplies the other forward-facing strobe light. Together this provides a forward flashing rate of 120 flashes per minute and an aft flashing rate of 60 flashes per minute.

(5)Flasher Timer Unit (FTU)

(a)The FTU controls the flash-rate of the strobe lights and the synchronization of the beacon lights with the strobe lights.

(b)The unit contains a 6 Hz uni-junction clock which, when subdivided, provides a 1 Hz supply to the power units and control assemblies. This provides the strobe lights with approximately 60 flashes per min. The output to the power units occurs 500 milliseconds after the output to the control assemblies so giving the synchronization betweeen beacon lights and strobe lights.

(c)The unit is supplied by three 115 V AC power sources. Power source 1 is used to supply a 'chopped' output for the control assemblies. Power source 2 is used for the control stage of the FTU and produces a 'chopped' output for the synchronization of both lights systems. Power source 3 is used as a standby for power source 2. If power source 2 fails or the FTU becomes defective, the output for the power unit becomes a constant 115V AC 400 Hz supply.

(d)A control lamp on the unit flashes at a rate of 60 flashes per minute when the unit is on normal power and remains on continuously if the unit is on standby power or the unit control circuits become defective. The unit is then in the 'bypass' mode.

(e)Built-in test circuits enable a functional test of the unit to be carried out. A pushbutton on the left of the unit is used to test the unit in the 'bypass' mode. The test button on the right is a self-test button and is used to monitor the system operation.

**ON A/C 101-200,

4. Operation (Ref. Fig. 005)

**ON A/C 001-100,

4. Operation (Ref. Fig. 006)

R **ON A/C 101-103, 105-200,

R Post SB 33-2050 For A/C 101-103,105-200,

R 4. Operation (Ref. Fig. 007)

**ON A/C 101-200,

A. 115V AC is supplied to the control switches 2LV and 25LV when the busbars are energized and the circuit breakers are closed.

B. When the control switches are in the ON position, 115V AC is supplied to the light power units 3LV and 4LV. A filter circuit, in the power unit, reduces the conducted and radiated interferences in the input supply. The supply is then converted to DC of various values for the internal circuits of the units. An AC/DC converter provides approx. 140V DC for the blocking converter. The blocking converter transforms the 140V DC to approx. 400V DC to charge the flash capacitors. The ignition impulse generator in the power unit provides a high frequency, high voltage oscillation to ionize the discharge tubes. When the tubes are ionized, the electrolytic flash capacitors discharge through the tubes, causing a flash. The flash rate is determined by the pulse or clock generator circuit, which is mainly a multivibrator. The flash rate is 60 ± 10 flashes per minute. A voltage limiter circuit limits the charging voltage to a safe value in case of supply overvoltage or a defective light.
The arc blanking circuit switches off the blocking converter after each flash to reduce the arc current of the tube to a safe limit.

C. When the switch STROBE 25LV is placed in the AUTO position and the landing gear struts are unloaded:
- relay 178GB is de-energized
- relay 177GB is energized via the closed contacts of relay 178GB and circuit breaker 83GB
- contacts of relay 177GB close to supply 115V AC to the strobe lights power units to flash the lights.

**ON A/C 001-100,

A. With the aircraft busbars energized and all circuit breakers closed, the

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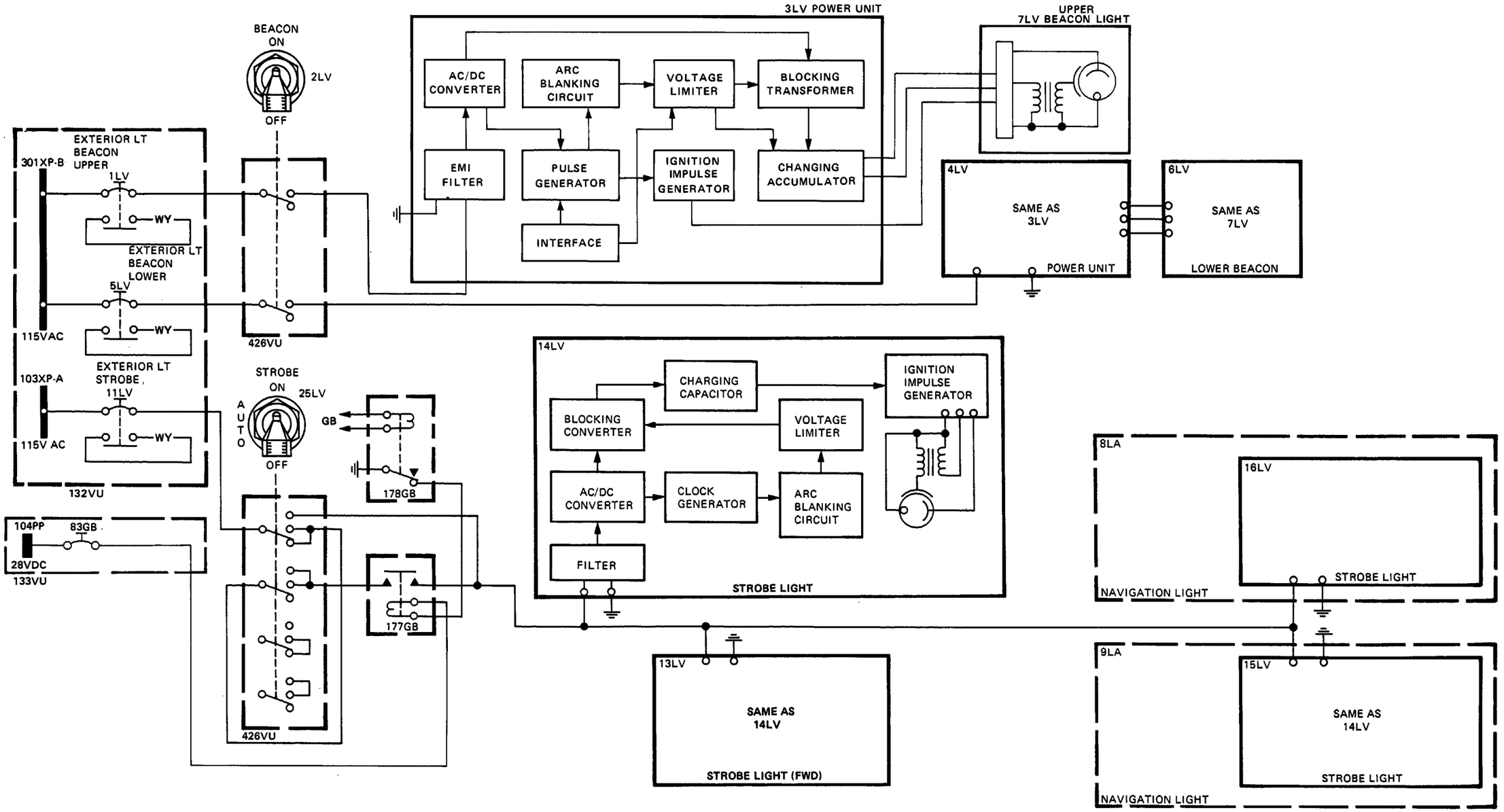

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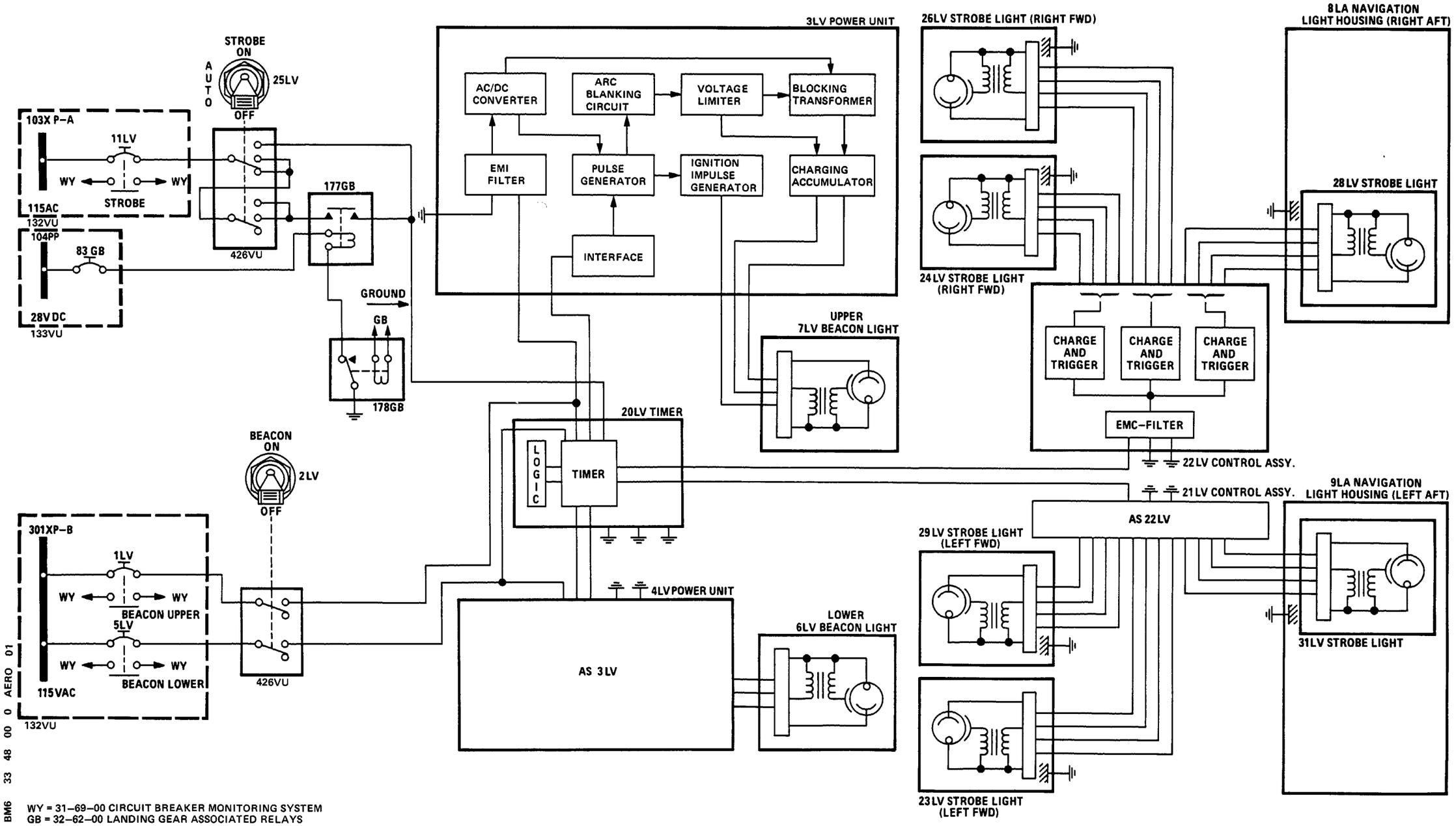
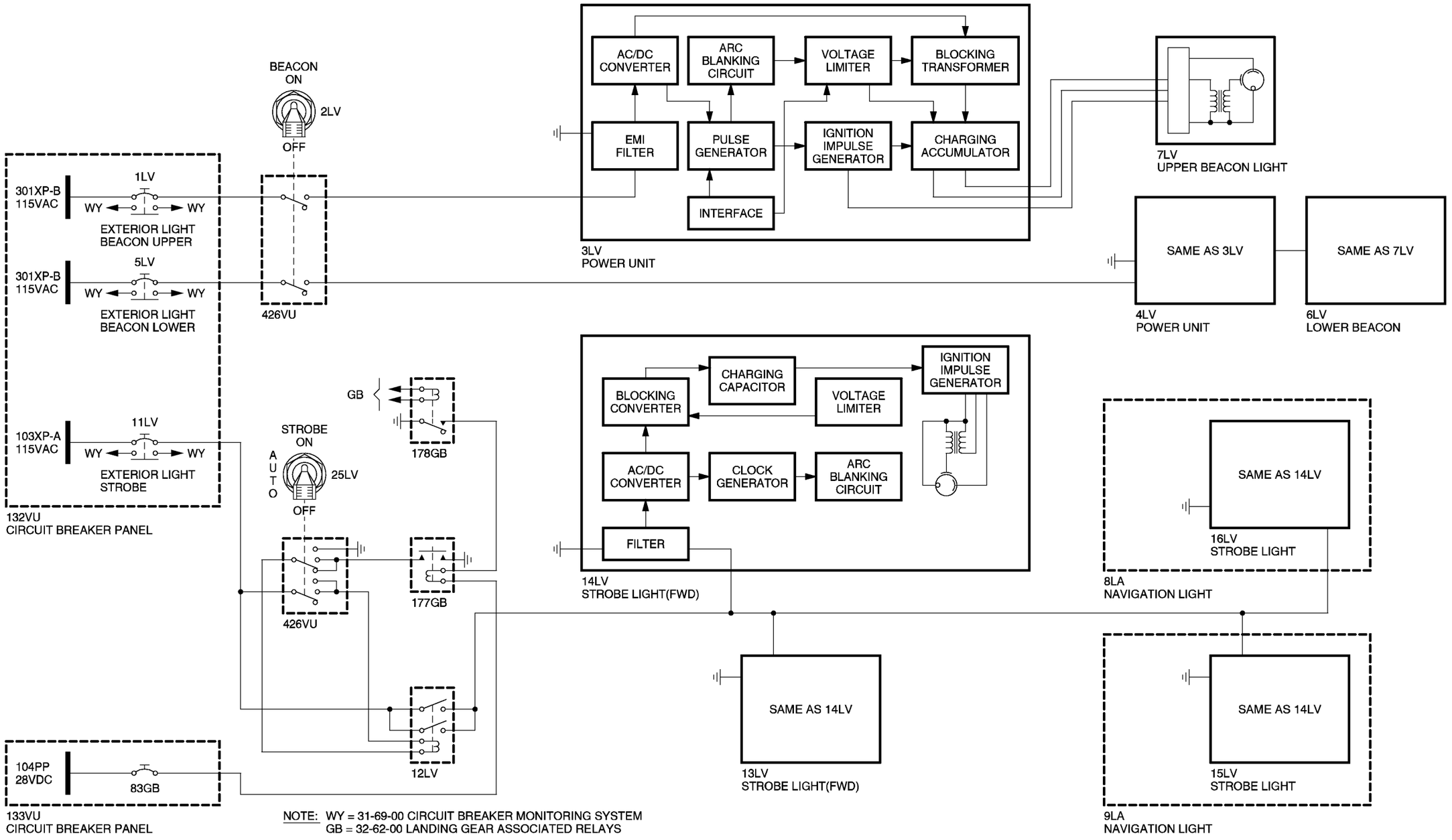
WY = 31–69–00 CIRCUIT BREAKER MONITORING SYSTEM
GB = 32–62–00 LANDING GEAR ASSOCIATED RELAYS

Anticollision Lighting - Schematic
Figure 005

R



Anticollision Lighting - Schematic
Figure 006



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Anticollision Lighting - Schematic
Figure 007

control switches and relays are supplied with power.

B. Strobe Lights
(1)Manual Operation
When the STROBE switch is placed to ON, the FTU is supplied with 115V AC. The FTU supplies both of the control assemblies with a 'chopped' 115 V supply at the rate of 60 pulses per minute. The control assemblies each produce the three separate outputs necessary for strobe light operation. The two forward-facing strobe lights together produce 120 flashes per minute, the aft-facing light unit 60 flashes per minute.
(2)Automatic Operation
When the switch STROBE 25LV is placed in the AUTO position and the landing gear struts are unloaded:
- relay 178GB is de-energized
- relay 177GB is energized via the closed contacts of relay 178GB and circuit breaker 83GB
- contacts of relay 177GB close to supply 115V AC to the strobe light power and timer units. The strobe lights flash as previously described.

C. Beacon Lights
(1)When the BEACON switch is placed to ON both power units are supplied with 115V AC. The power units generate the voltages necessary to cause the beacon lights to flash at approximately 60 flashes per minute.
(2)The FTU is supplied with two 115V AC power sources (main and standby) for subsequent synchronization with the strobe lights.

R **ON A/C 101-103, 105-200,

R Post SB 33-2050 For A/C 101-103,105-200,

R A. 115V AC is supplied to the control switches 2LV and 25LV when the busbars
R are energized and the circuit breakers are closed.

R B. When the control switches are in the ON position, 115V AC is supplied to
R the light power units 3LV and 4LV. A filter circuit, in the power unit, re-
R duces the conducted and radiated interferences in the input supply. The
R supply is then converted to DC of various values for the internal circuits
R of the units. An AC/DC converter provides approx. 140V DC for the blocking
R converter. The blocking converter transforms the 140V DC to approx. 400V DC
R to charge the flash capacitors. The ignition impulse generator in the power
R unit provides a high frequency, high voltage oscillation to ionize the dis-
R charge tubes. When the tubes are ionized, the electrolytic flash capacitors
R discharge through the tubes, causing a flash. The flash rate is determined
R by the pulse or clock generator circuit, which is mainly a multivibrator.
R The flash rate is 60 ± 10 flashes per minute. A voltage limiter circuit
R limits the charging voltage to a safe value in case of supply overvoltage
R or a defective light.
R The arc blanking circuit switches off the blocking converter after each
R flash to reduce the arc current of the tube to a safe limit.

R C. When the switch **STROBE 25LV** is placed in the **AUTO** position and the landing
R gear struts are unloaded:
R - relay **178GB** is de-energized
R - relay **177GB** is energized via the closed contacts of relay **178GB** and
R circuit breaker **83GB**
R - contacts of relay **177GB** close and **115V AC** is supplied through the
R relay (12LV) to the strobe lights power units to flash the lights.

1. Operational Test

A. Equipment and Materials

ITEM	DESIGNATION
(1)	Electrical Ground Power Unit - 3-Phase, 115/200 V, 400 Hz

Referenced Procedure

- 24-41-00, P. Block 301	AC External Power Control

B. Procedure

(1)Job Set Up

(a)Connect electrical ground power unit and energize aircraft electrical network (Ref. 24-41-00, P. Block 301).

(b)Make certain that electronics racks ventilation is correct.

(c)Make certain that the following circuit breakers are closed:

PANEL	SERVICE	IDENT.	LOCATION
132VU	LIGHTING/EXT LT/BEACON/UPPER	1LV	K73
132VU	LIGHTING/EXT LT/BEACON/LOWER	5LV	K74
132VU	LIGHTING/EXT LT/STROBE	11LV	N79
133VU	HYDRAULIC/L/G PROX DET & RELAYS SYS 2/ GEAR DOWN & OVHD PNL POS IND	83GB	V51

(d)Open, safety and tag the following circuit breaker:

PANEL	SERVICE	IDENT.	LOCATION
133VU	HYDRAULIC/L/G PROX DET & RELAYS SYS 2/ FLT/GND	1GB	V52

R **ON A/C 101-200,

(2)Test

ACTION	RESULT
1. On panel 426VU: - place toggle switch 2LV BEACON to ON position. - place toggle switch 2LV BEACON to OFF position.	Zones 150, 240: - anticollision lights 6LV and 7LV flash at approx. 60 times/min. - anticollision lights go off.
2. On panel 426VU: - place toggle switch 25LV STROBE to ON position.	Zones 531, 631: - strobe lights 13LV, 14LV, 15LV and 16LV flash at approx. 60 times/min.

ACTION	RESULT
- place toggle switch 25LV STROBE to AUTO position.	- strobe lights remain on.
3. On panel 426VU: - place toggle switch 25LV STROBE to OFF position.	Zones 531, 631: - strobe lights go off.

R **ON A/C 001-100,

(2)Test

ACTION	RESULT
1. On panel 426VU: - place toggle switch 2LV BEACON to ON position. - place toggle switch 2LV BEACON to OFF position.	Zones 150 and 240: - anticollision lights 6LV and 7LV flash approx. 60 times/min. - anticollision lights go off.
2. On panel 426VU: - place toggle switch 25LV STROBE to ON position. - place toggle switch 25LV STROBE to AUTO position.	Zones 531 and 631: - forward-facing strobe lights flash at approx. 120 times/min. - rearward-facing strobe light flashes at approx. 60 times/min. - strobe lights remain on.
3. On panel 426VU: - place toggle switch 25LV STROBE to OFF position.	Zones 531, 631: - strobe lights go off.

R **ON A/C ALL

(3)Close-Up
(a)Remove safety clip and tag, and close circuit breaker 1GB.
(b)De-energize aircraft electrical network and disconnect ground power unit (Ref. 24-41-00, P. Block 301).

UPPER ANTICOLLISION LIGHT - REMOVAL/INSTALLATION

NOTE : Upper anticollision light can be removed internally or externally.

1. Equipment and Materials

ITEM	DESIGNATION
A.	Stepladder, 2.5 m (8.20 ft.)
B.	Access Platform, 16 m (52.5 ft.)
C.	Electrical Ground Power Unit - 3-Phase, 115/200 V, 400 Hz
D.	Sealing Ring
E.	Protective Caps

Referenced Procedures

- 24-41-00, P. Block 301	AC External Power Control
- 25-23-11, P. Block 401	Ceiling Panels
- 33-51-12, P. Block 401	Ceiling Exit Sign-Module

2. Procedure

A. Job Set-Up (internal)

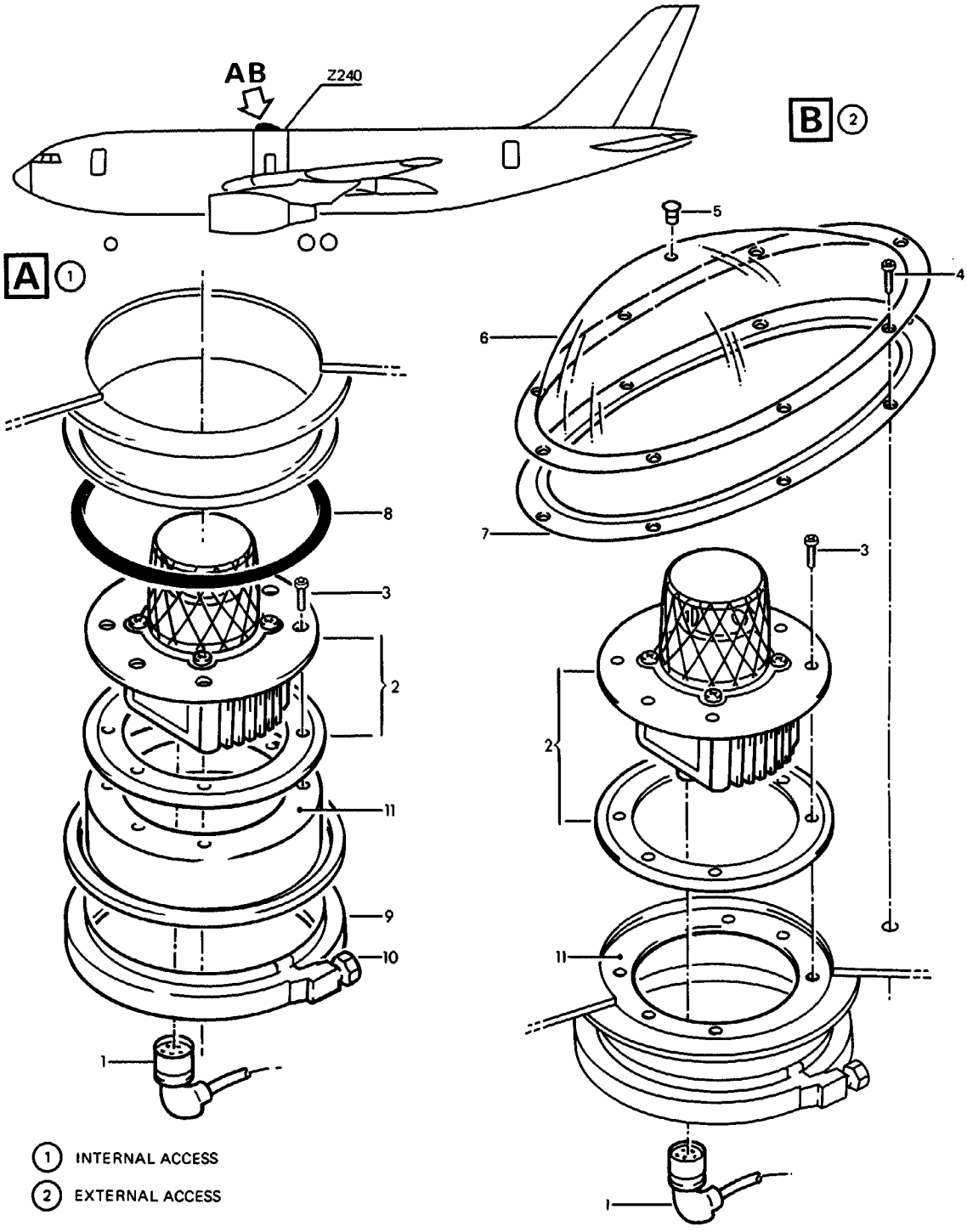
(1)Open, safety and tag the following circuit breaker:

PANEL	SERVICE	IDENT.	LOCATION
132VU	LIGHTING-EXT LT-BEACON UPPER	1LV	K73

R CAUTION : DO NOT TOUCH THE LAMP GLASS WITH YOUR FINGERS.
R THE OILS FROM YOUR SKIN WILL QUICKLY CAUSE DETERIORATION OF THE LAMP.
R IF YOU ACCIDENTALLY TOUCH THE LAMP GLASS, CLEAN IT WITH A LINT-FREE
R CLOTH.

(2)On panel 436VU, make certain that switch EMER EXIT LT ON-ARM-DISARM (22WL) is in DISARM position.
(3)On panel 818VU, make certain that pushbutton switch EMERG (28WL) is in OFF position.
(4)Position stepladder.
(5)Remove ceiling exit sign-module in area of emergency door (RH) (Ref. 33-51-12, P. Block 401).
(6)Remove RH ceiling panels in area of upper anticollision light, Zone 240 between FR39 and FR44 (Ref. 25-23-11, P. Block 401).
(7)Remove air conditioning duct, Zone 240 between FR39 and FR44.

B. Removal (internal)
(1)Disconnect electrical connector (1) from anticollision light assembly (2) and fit protective cap.
(2)Slacken screw (10) and remove clamping ring (9).
(3)Remove anticollision light assembly (2) and sealing ring (8).
(4)Remove screws (3) from mounting plate (11).



Anticollision Light, Upper
Figure 401

C. Installation (internal)
(1)Install anticollision light assembly (2) with screws (3) on mounting plate (11).
(2)Position anticollision light assembly (2), sealing ring (8) and secure with clamping ring (9), tighten screw (10).
(3)Remove cap and connect electrical connector (1) to anticollision light assembly (2).

D. Job Set-Up (external)
(1)Open, safety and tag the following circuit breaker:

PANEL	SERVICE	IDENT.	LOCATION
132VU	LIGHTING - EXTERIOR LT - BEACON UPPER	1LV	K73

(2)Position access platform.

E. Removal (external)
(1)Remove screws (4).
(2)Remove glass lens (6) with gasket (7).
(3)Remove screws (3) from mounting plate (11).
CAUTION : MAKE CERTAIN THAT WHEN REMOVING LIGHT ASSEMBLY, UNDUE STRAIN IS NOT PLACED ON WIRING ASSEMBLY.
(4)Remove anticollision light assembly (2) until the connector is visible.
(5)Disconnect electrical connector (1) from anticollision light, secure cable and fit protective cap.

F. Preparation of Replacement Components
(1)Make certain that lens drain plug (5) is fitted.

G. Installation (external)
(1)Remove cap and connect electrical connector (1).
(2)Install anticollision light assembly (2) with screws (3) on mounting plate (11).
(3)Install gasket (7) and glass lens (6) with screws (4).

H. Test
(1)Connect electrical ground power unit and energize aircraft electrical network (Ref. 24-41-00, P. Block 301):
(2)Remove safety clips and tags and close circuit breaker 1LV.
(3)Test of anticollision Light 7LV.

ACTION	RESULT
1. On external light control panel 426VU: - place toggle switch BEACON (2LV) to ON position. - place toggle switch BEACON (2LV) to OFF position.	Zone 240: - anticollision light 7LV flashes continuously. - anticollision light goes off.

J. Close-Up (internal)
(1)Make certain that working area is clean and clear of tools and miscel-

laneous items of equipment.
(2)Install air conditioning duct.
(3)Install RH ceiling panels (Ref. 25-23-11, P. Block 401).
(4)Install ceiling exit sign-module and carry out test procedure (Ref. 33-51-12, P. Block 401).
(5)Remove stepladder.
(6)De-energize aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).

K. Close Up (external)
(1)Make certain that the working area is clean and clear of tools and miscellaneous items of equipment.
(2)Remove access platform.
(3)De-energize aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).

LOWER ANTICOLLISION LIGHT - REMOVAL/INSTALLATION

NOTE : Lower anticollision light can be removed internally or externally.

1. Equipment and Materials

ITEM	DESIGNATION
A.	Electrical Ground Power Unit - 3-Phase, 115/200 V, 400 Hz
B.	Protective Caps
C.	Sealing Ring

Referenced Procedures

- 24-41-00, P. Block 301	AC External Power Control
- 53-10-33, P. Block 401	AFT Cargo Compartment Floor Panels

2. Procedure

A. Job Set-Up (internal)

(1)Open, safety and tag the following circuit breaker:

PANEL	SERVICE	IDENT.	LOCATION
132VU	LIGHTING-EXT LT-BEACON LOWER	5LV	K74

R CAUTION : DO NOT TOUCH THE LAMP GLASS WITH YOUR FINGERS.
R THE OILS FROM YOUR SKIN WILL QUICKLY CAUSE DETERIORATION OF THE LAMP.
R IF YOU ACCIDENTALLY TOUCH THE LAMP GLASS, CLEAN IT WITH A LINT-FREE
R CLOTH.

(2)Remove floor panel in AFT cargo compartment (Ref. 53-10-33, P. Block 401).

B. Removal (internal)

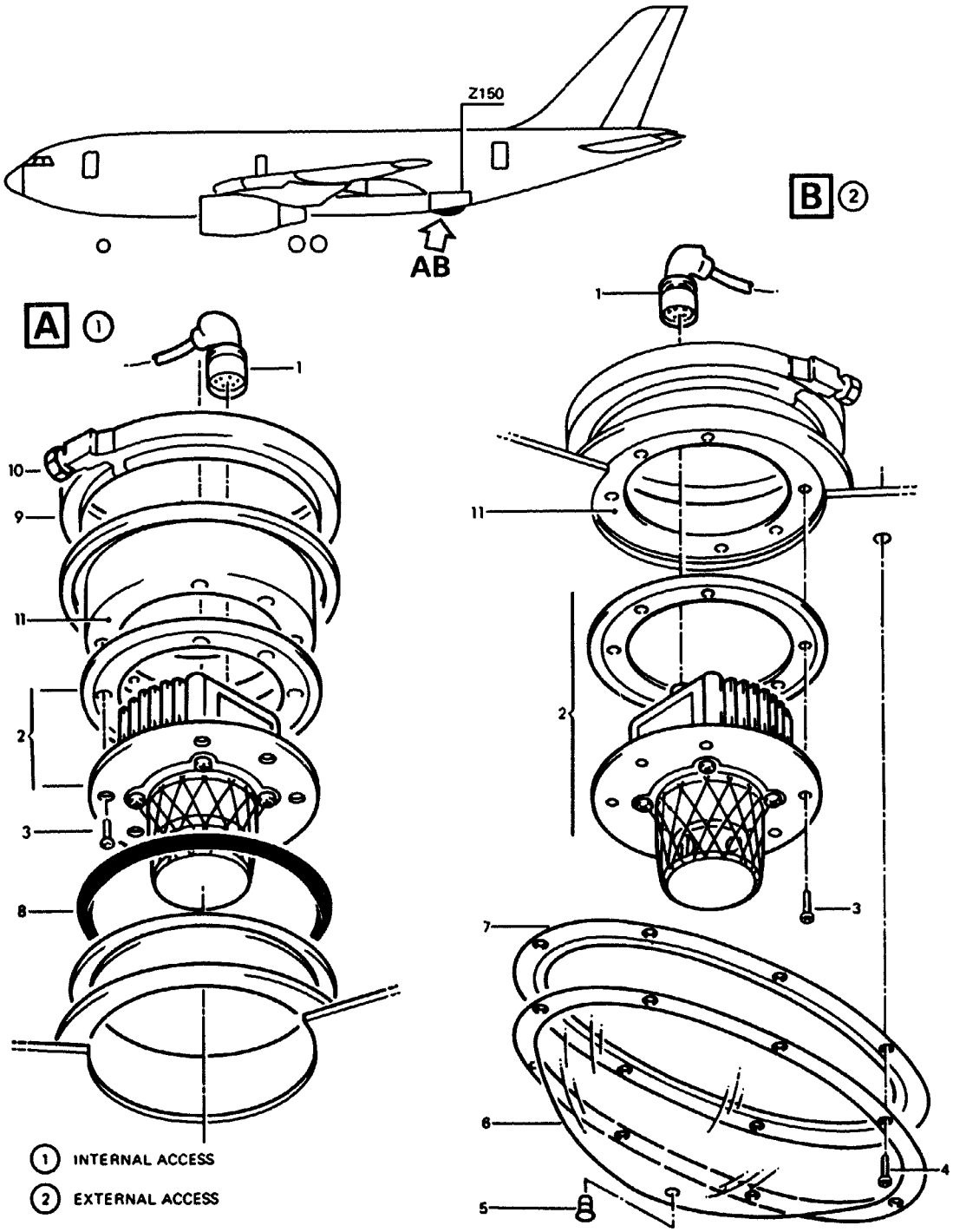
(1)Disconnect electrical connector (1) from anticollision light assembly (2) and fit protective caps.
(2)Slacken screw (10) and remove clamping ring (9).
(3)Remove anticollision light assembly (2) and sealing ring (8).
(4)Remove screws (3) from mounting plate (11).

C. Installation (internal)

(1)Install anticollision light assembly (2) with screws (3) on mounting plate (11).
(2)Position anticollision light assembly (2) and sealing ring (8), secure with clamping ring (9) and tighten screw (10).
(3)Remove protective caps and connect electrical connector (1) to anti-collision light assembly (2).

D. Job Set-Up (external)

(1)Open, safety and tag the following circuit breaker:



Lower Anticollision Light
Figure 401

PANEL	SERVICE	IDENT.	LOCATION
132VU	LIGHTING-EXT LT-BEACON LOWER	5LV	K74

E. Removal (external)
(1)Remove screws (4).
(2)Remove glass lens (6) with gasket (7).
(3)Remove screws (3) from mounting plate (11).
CAUTION : MAKE CERTAIN THAT WHEN REMOVING LIGHT ASSEMBLY, UNDUE STRAIN IS NOT PLACED ON WIRING ASSEMBLY.
(4)Remove anticollision light assembly (2) until the connector is visible.
(5)Disconnect electrical connector (1) from anticollision light and fit protective caps.

F. Preparation of Replacement Components
(1)Make certain that lens drain plug (5) is removed.

G. Installation (external)
(1)Remove caps and connect electrical connector (1).
(2)Install anticollision light assembly (2) with screws (3) on mounting plate (11).
(3)Install gasket (7) and glass lens (6) with screws (4).

H. Test
(1)Remove safety clip and tag and close circuit breaker 5LV.
(2)Connect electrical ground power unit and energize aircraft electrical network (Ref. 24-41-00, P. Block 301).
(3)Test of Anticollision Light 6LV.

ACTION	RESULT
1. On external light control panel 426VU: - place toggle switch BEACON (2LV) to ON position. - place toggle switch BEACON (2LV) to OFF position.	Zone 150: - anticollision light 6LV flashes continuously - anticollision light goes off.

J. Close-Up (internal)
(1)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(2)Install floor panel in AFT cargo compartment (Ref. 53-10-33, P. Block 401).
(3)De-energize aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).

K. Close-Up (external)
(1)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(2)De-energize aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).

POWER SUPPLY UNIT - UPPER BEACON LIGHT
REMOVAL/INSTALLATION

1. Equipment and Materials

ITEM	DESIGNATION
A.	Electrical Ground Power Unit - 3-Phase, 115/200 V, 400 Hz
B.	Stepladder 2.0 m (6 ft. 6 in.)

Referenced Procedures

- 24-41-00, P. Block 301	AC External Power Control
- 25-23-11, P. Block 401	Ceiling Panels

2. Procedure

A. Job Set-Up

(1)Open, safety and tag the following circuit breaker:

PANEL	SERVICE	IDENT.	LOCATION
132VU	LIGHTING-EXT LT-BEACON UPPER	1LV	K73

(2)Position stepladder

(3)Remove relevant ceiling panel (Ref. 25-23-11, P. Block 401) to gain access to power supply unit.

B. Removal (Ref. Fig. 401)

(1)Disconnect electrical connectors (1).

(2)Remove four screws (2).

(3)Remove power supply unit (3).

C. Installation (Ref. Fig. 401)

(1)Position power supply unit (3) and secure with screws (2).

(2)Connect electrical connectors (1).

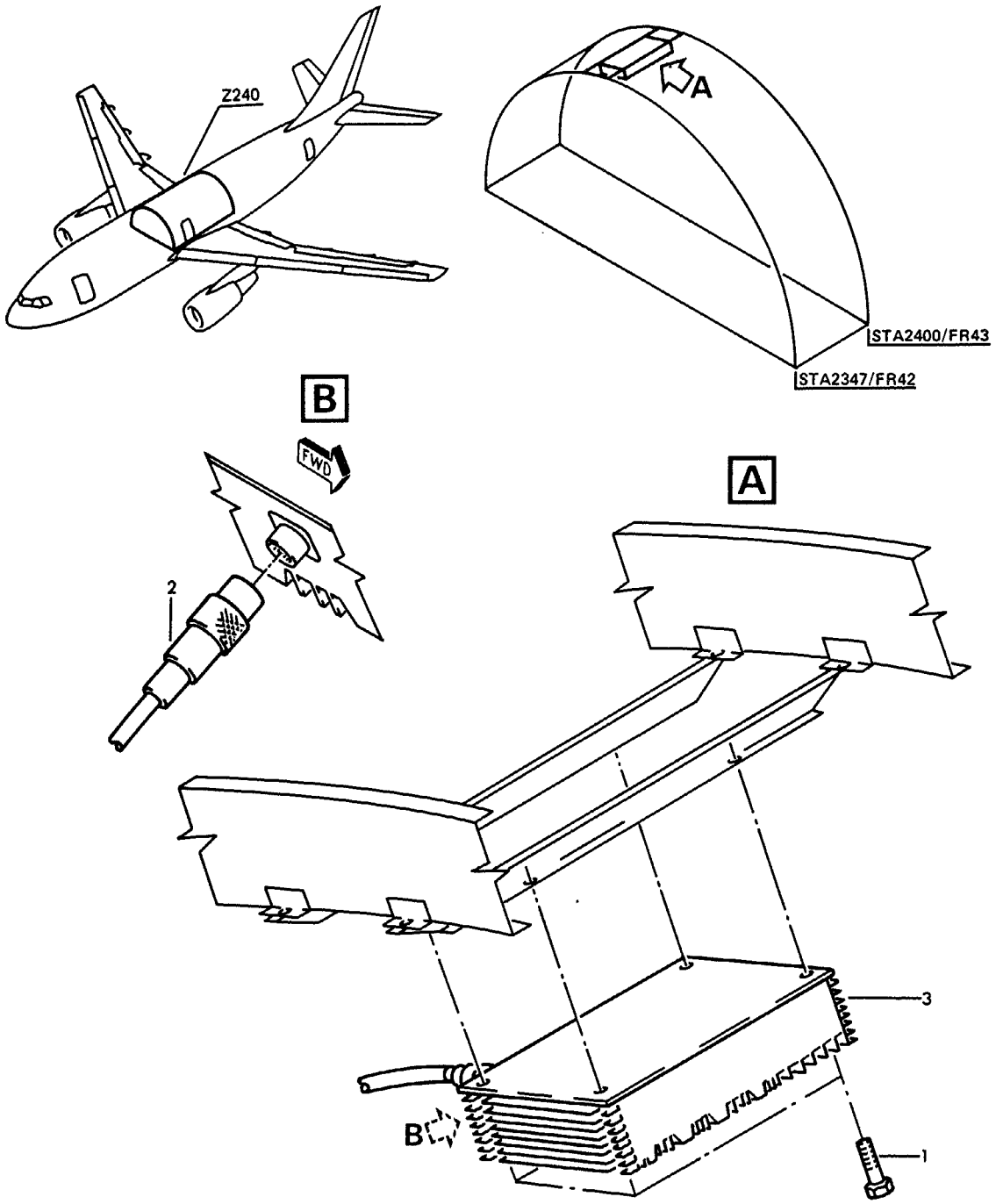
D. Test

(1)Connect electrical ground power unit and energize aircraft electrical network (Ref. 24-41-00, P. Block 301)

(2)Remove safety clips and tags and close circuit breaker 1LV.

ACTION	RESULT
1. On panel 426VU: - place toggle switch **BEACON** (2LV) to **ON** position. - place toggle switch **BEACON** (2LV) to **OFF** position.	Zone 240: - anticollision light 7LV flashes continuously. - anticollision light goes off.

E. Close-Up



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Power Supply Unit - Upper
Figure 401

(1)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(2)Install ceiling panel (Ref. 25-23-11, P. Block 401).
(3)Remove stepladder
(4)De-energize aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).

POWER SUPPLY UNIT - LOWER BEACON LIGHT
REMOVAL/INSTALLATION

1. Equipment and Materials

ITEM	DESIGNATION
A.	Electrical Ground Power Unit - 3-Phase, 115/200 V 400 Hz.
B.	Platform 2.30 m (7.5 ft.)

Referenced Procedures

- 24-41-00, P. Block 301	AC External Power Control
- 53-10-35, P. Block 401	Bulk Cargo Compartment Floor Panels

2. Procedure

A. Job Set-Up
(1)Open safety and tag the following circuit breaker:

PANEL	SERVICE	IDENT.	LOCATION
132VU	LIGHTING-EXT LT-BEACON LOWER	5LV	K74

(2)Position platform.
(3)Remove relevant Bulk Cargo Compartment Floor Panel (Ref. 53-10-35 P. Block 401) to gain access to power supply unit.

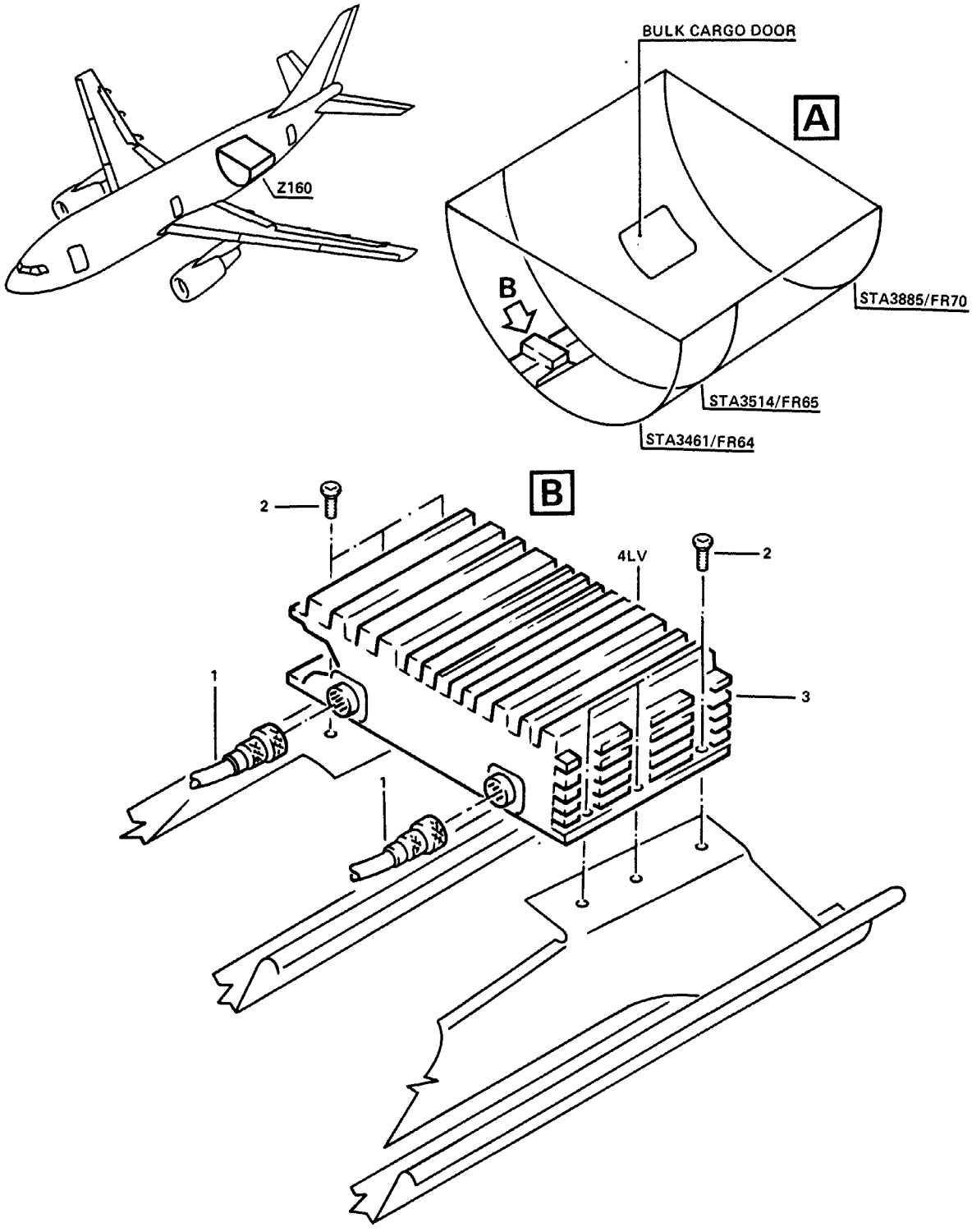
B. Removal (Ref. Fig. 401)
(1)Disconnect electrical connectors (1).
(2)Remove six retaining screws (2).
(3)Remove power supply unit (3).

C. Installation (Ref. Fig. 401)
(1)Position power supply unit (3) and secure with screws (2).
(2)Connect electrical connectors (1).

D. Test
(1)Connect electrical ground power unit and energize aircraft electrical network (Ref. 24-41-00, P. Block 301).
(2)Remove safety clip and tag and close circuit breaker 5LV.

ACTION	RESULT
1. On panel 426VU: - place toggle switch BEACON (2LV) to ON position. - place toggle switch BEACON (2LV) to OFF position.	Zones 150 and 240: - anticollision light 6LV flashes continuously. - anticollision light goes off.

E. Close-Up



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Power Supply Unit - LOWER
Figure 401

(1)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(2)Install Bulk Cargo Compartment floor panel (Ref. 53-10-35, P. Block 401).
(3)Remove platform.
(4)De-energize aircraft electical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301)

FLASHER TIMING UNIT - REMOVAL/INSTALLATION

1. Equipment and Materials

ITEM	DESIGNATION
A.	Circuit Breaker Safety Clips
B.	Electrical Ground Power Unit - 3-Phase, 115/200 V, 400 Hz

Referenced Procedures

- 24-41-00, P. Block 301	AC External Power Control
- 52-41-00, P. Block 1	Access Doors

2. Procedure

A. Job Set-Up
(1)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
132VU	LIGHTING-EXT LT-BEACON UPPER	1LV	K73
132VU	LIGHTING-EXT LT-BEACON LOWER	5LV	K74
132VU	LIGHTING-EXTERIOR LT-STROBE	11LV	N79
133VU	HYD-L/G PROX DET/RELAYS-SYS 2 GEAR DN/OVHD PNL IND	83GB	V51

(2)Remove access door 136AR, RH (Ref. 52-41-00, P. Block 1).

B. Removal (Ref. Fig. 401)
(1)Disconnect electrical connector (1).
(2)Loosen fasteners (2), remove flasher timing unit (3) from bracket (4).

C. Installation (Ref. Fig. 401)
(1)Install flasher timing unit (3) on bracket (4) and secure with fasteners (2).
(2)Connect electrical connector (1).

D. Test
(1)Connect electrical ground power unit and energize aircraft electrical network (Ref. 24-41-00, P. Block 301).
(2)Remove safety clips and tags and close circuit breakers 1LV, 5LV, 11LV and 83GB.

ACTION	RESULT
1. On panel 426VU: - place toggle switch BEACON (2LV) to ON position. - place toggle switch BEACON (2LV) to OFF position.	Zones 150 and 240: - anticollision lights 6LV and 7LV flash approx. 60 times/min. - anticollision lights go off.
2. On panel 426VU:	Zones 531 and 631:

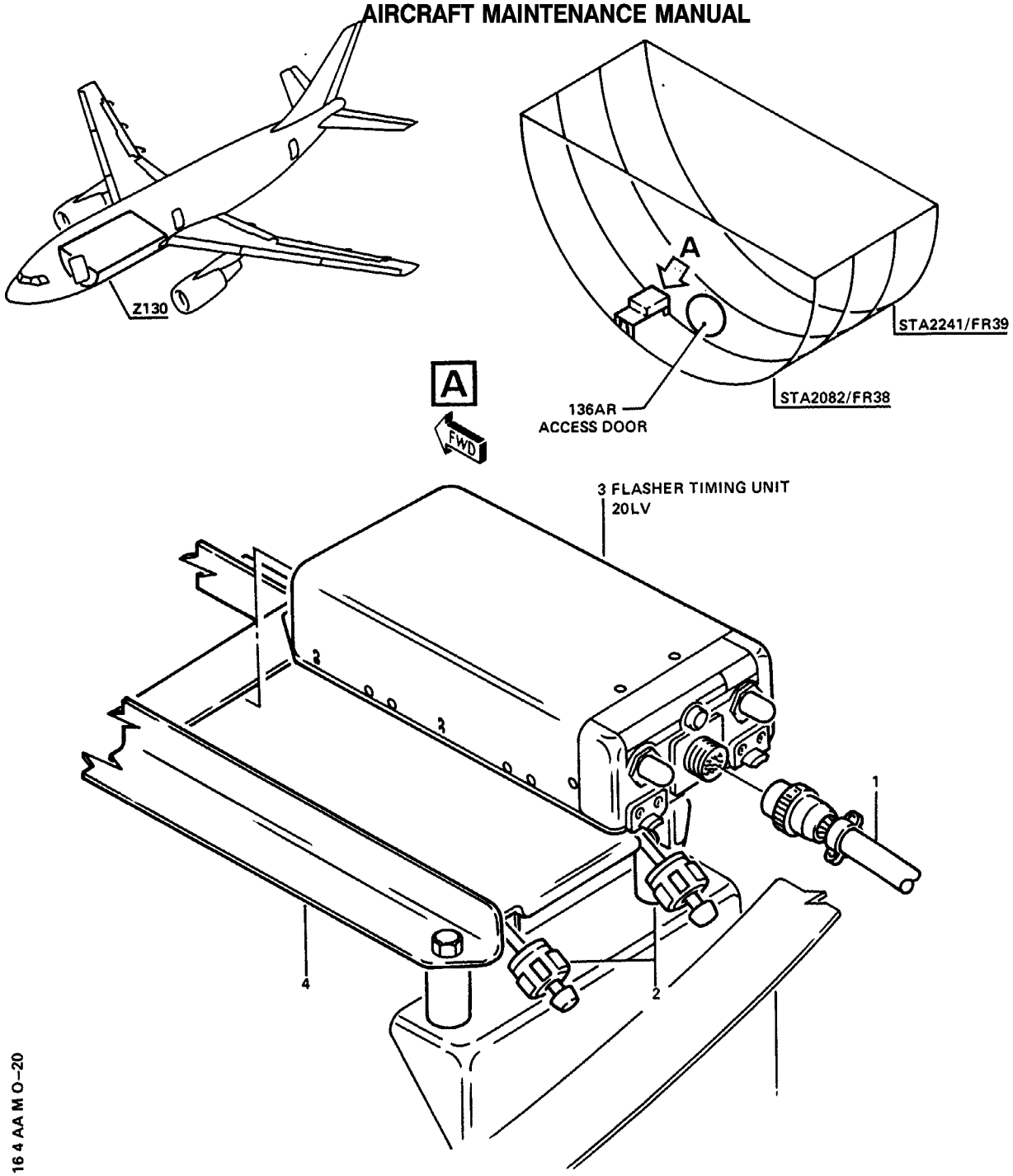
ACTION	RESULT
- place toggle switch **STROBE (25LV)** to **ON** position.	- forward-facing strobe lights flash at approx. 120 times min. rearwards-facing strobe light flashes at approx. 60 times/min.
3. On panel 426VU: - place toggle switch **STROBE (25LV)** to **OFF** position.	Zones 531, 631: - strobe lights go off.
4. On panel 426VU: - place toggle switches **BEACON (2LV)** and **STROBE (25LV)** to **ON** position.	Zones 150, 240, 531 and 631: - anticollision lights and strobe lights flash in synchronization.
5. On panel 426VU: - place toggle switches **BEACON (2LV)** and **STROBE (25LV)** to **OFF** position.	Zones 150, 240, 531 and 631: - anticollision lights and strobe lights go off.

E. Close-Up

(1) Make certain that the working area is clean and clear of tools and miscellaneous items of equipment.

(2) Install access door 136AR, RH (Ref. 52-41-00, P. Block 1).

(3) De-energize aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).



B M 6 33 48 16 4 AA M O-20

Flasher Timing Unit
Figure 401

CONTROL UNIT - ANTI-COLLISION LIGHT - REMOVAL/INSTALLATION

WARNING : BEFORE PROCEEDING WITH MAINTENANCE WORK ON OR NEAR MECHANICAL CONTROLS OR PRIMARY FLIGHT CONTROL SURFACES, LANDING GEAR, ASSOCIATED DOORS OR ANY MOVING COMPONENT, MAKE CERTAIN THAT GROUND SAFETIES AND/OR WARNING NOTICES ARE IN CORRECT POSITION TO PREVENT INADVERTENT OPERATION OF CONTROLS.

WARNING : BEFORE POWER IS SUPPLIED TO THE AIRCRAFT, MAKE CERTAIN THAT ELECTRICAL CIRCUITS UPON WHICH WORK IS IN PROGRESS ARE ISOLATED.

1. Reasons for the Job

A. Replacement of defective control unit.

B. Removal of control unit for trouble shooting checks.

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 6 m (19 ft. 8 in.)
B.	Circuit Breaker Safety Clips and Tags
C.	Blanking Caps and Plugs

Referenced Procedures

- 21-20-00, P. Block 301	Air Conditioning - Distribution/Extraction
- 24-41-00, P. Block 301	AC External Power Control

3. Procedure

(Ref. Fig. 401)

A. Job Set-Up

(1)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
132VU	LIGHTING-EXT LT-BEACON UPPER	1LV	K73
132VU	LIGHTING-EXT LT-BEACON LOWER	5LV	K74
132VU	LIGHTING-EXT LT-STROBE	11LV	N79

(2)Position access platform at forward section of wing tip zone 531 (631).

(3)Remove access panel 531AB (631AB).

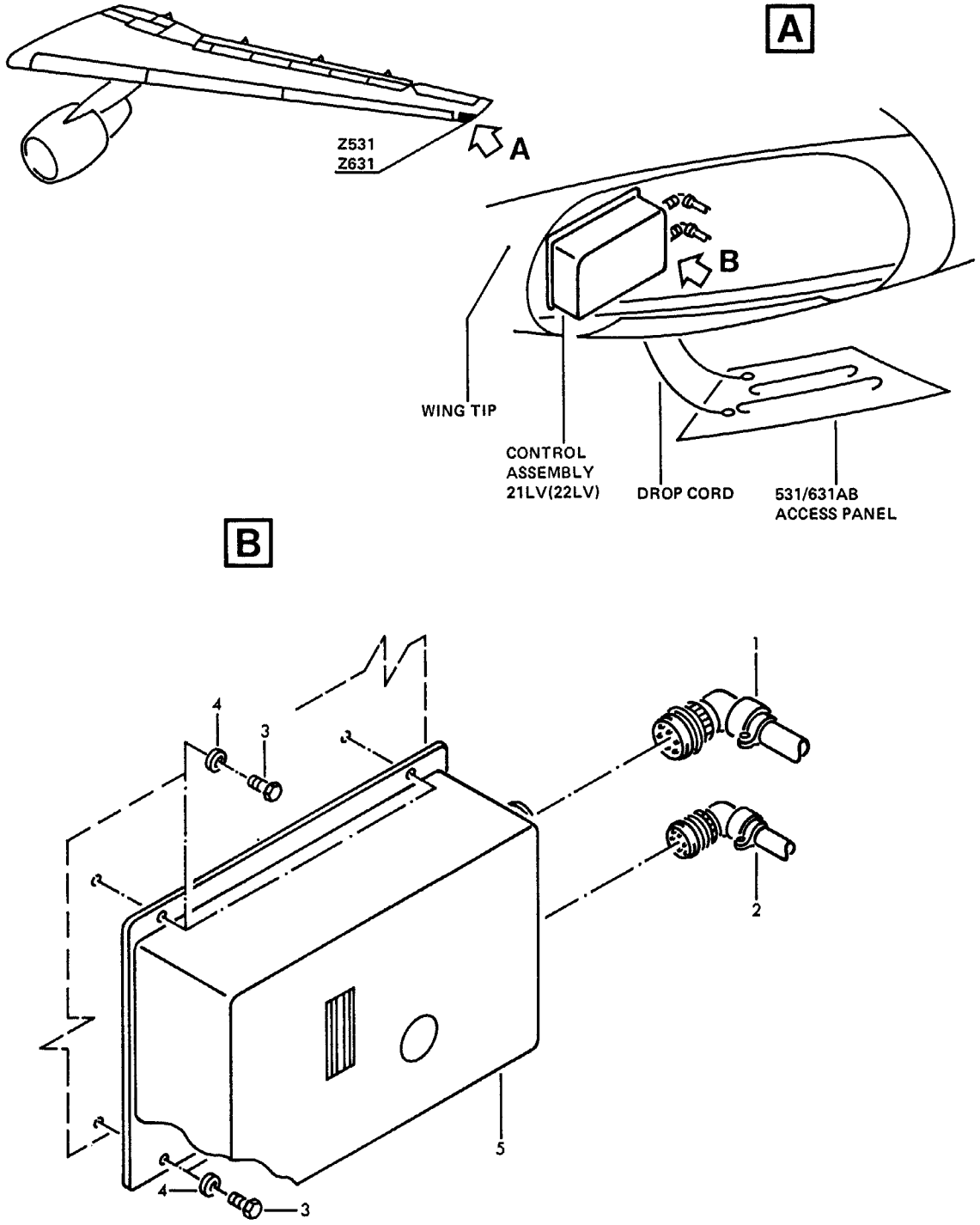
B. Removal

(1)Disconnect electrical connectors (1),(2).

(2)Put blanking caps on electrical connectors (1),(2) and blanking plugs on control unit (5).

(3)Remove screws (3) and washers (4).

(4)Remove control unit (5).



Control Unit - Anti-collision Light
Figure 401

C. Installation
(1)Position control unit (5) and secure with washers (4) and screws (3).
(2)Remove blanking caps from electrical connectors (1),(2) and blanking plugs from control unit (5).
(3)Connect electrical connectors (1),(2).

D. Test
(1)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(2)Make certain that electronics racks ventilation is correct (Ref. 21-20-00, P. Block 301).
(3)Remove safety clips and tags and close the following circuit breakers:
WARNING : DO NOT LOOK DIRECTLY INTO FLaSHING LIGHT(S). FLASHING LIGHTS CAN IRRITATE EYESIGHT.

PANEL	SERVICE	IDENT.	LOCATION
132VU	LIGHTING-EXT LT-BEACON UPPER	1LV	K73
132VU	LIGHTING-EXT LT-BEACON LOWER	5LV	K74
132VU	LIGHTING-EXT LT-STROBE	11LV	N79

R (4)Test of Control Unit 21LV (22LV).

ACTION	RESULT
1. On EXT LT panel 426VU:	At wing tip (zone 531/631):
- place toggle switch 25LV STROBE to ON position.	- forward-facing strobe lights 23LV, 24LV, 26LV and 29LV flash at approx. 120 times/min. - rearward-facing strobe lights 28LV and 31LV flash at approx. 60 times/min.
- place toggle switch 25LV STROBE to OFF position.	- forward-facing and rearward-facing strobe lights go off.

E. Close-Up
(1)De-energize the aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).
(2)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(3)Install access panel 531AB (631AB).
(4)Remove access platform.

WING AND ENGINE SCAN LIGHTING - DESCRIPTION AND OPERATION

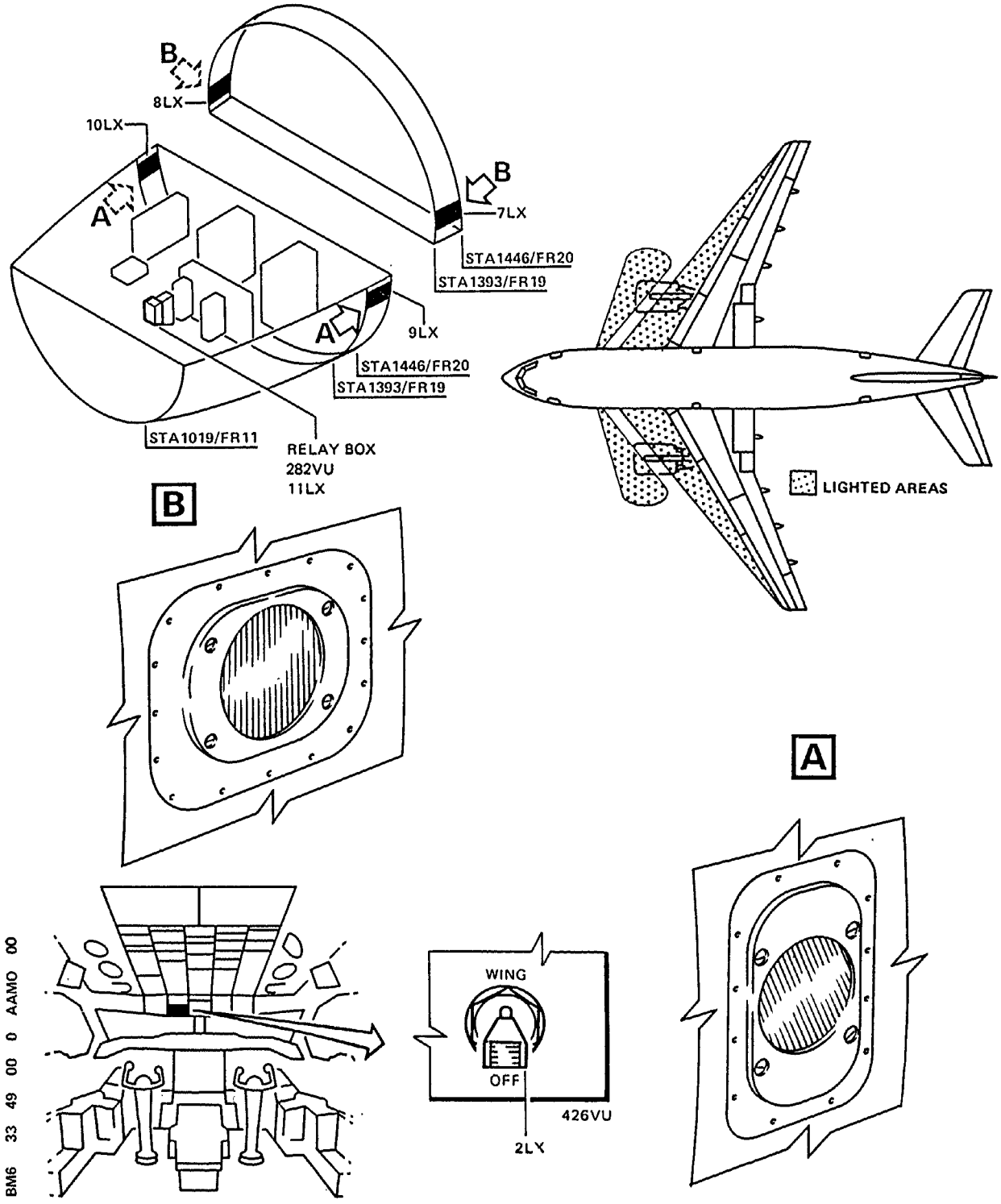
1. General

Wing and engine scan lighting consists of 4 lights; 2 for wing scan (LH and RH) and 2 for engine scan (LH and RH).

2. Component Location

(Ref. Fig. 001)

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF.
2LX	TOGGLE SWITCH, WING	426VU	211		
7LX	WING SCAN LIGHT LH		231		33-49-12
8LX	WING SCAN LIGHT RH		232		33-49-12
9LX	ENGINE SCAN LIGHT LH		121		33-49-11
10LX	ENGINE SCAN LIGHT RH		122		33-49-11
11LX	RELAY	282VU	122		



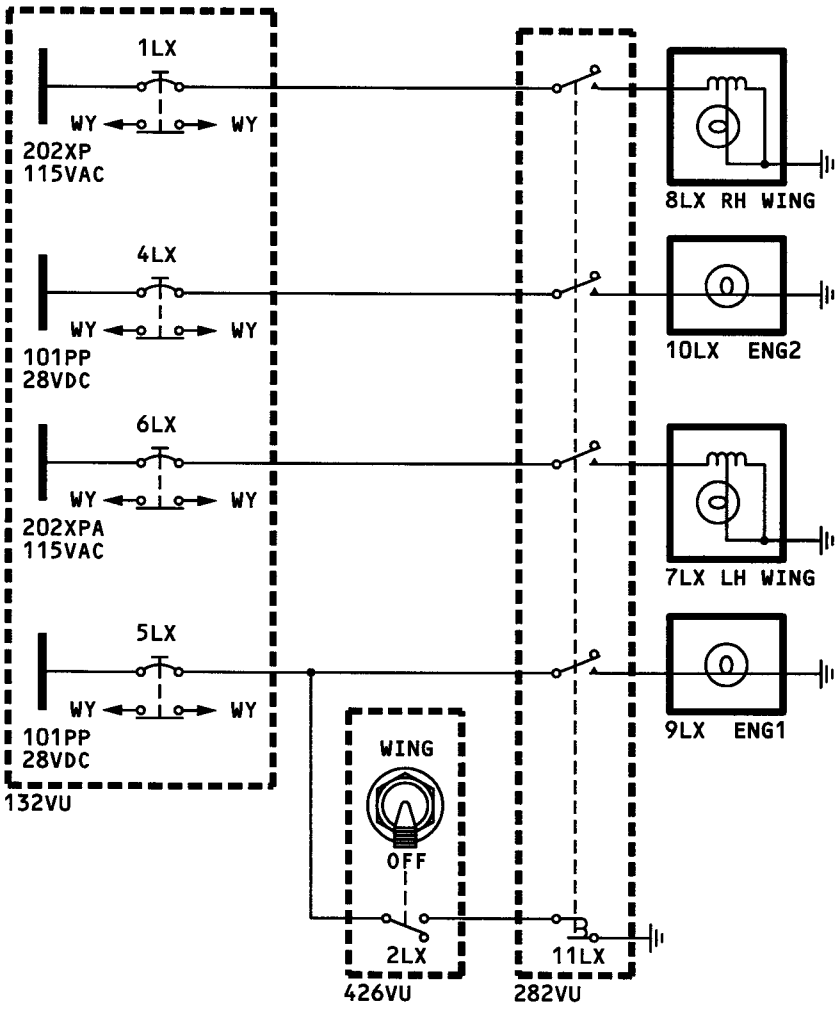
Component Location
Figure 001

3. Description

A. The wing and engine scan lighting system comprises:
- two fixed position wing scan lights (7LX, 8LX), installed in the LH and RH forward fuselage. Each light contains a stepdown transformer which reduces the voltage to 13 V AC.
- two fixed position engine scan lights (9LX, 10LX), installed in the LH and RH forward fuselage.
- toggle switch (2LX), installed on panel 426VU, controls the 28 V DC supply to the power relay (11LX).

B. The wing scan lights (7LX, 8LX) are supplied with 115 V AC from busbar 202XP/A via circuit breakers WING/L (1LX), WING/R (6LX) and power relay 11LX. The engine scan lights (9LX, 10LX) and the power relay (11LX) are supplied with 28 V DC from busbar 101PP via circuit breakers ENG/R (4LX) and ENG/L (5LX).
The circuit breakers used are of the monitory type. A corresponding annunciator, labelled OPEN, comes on when a circuit breaker is open and the busbar is energized.
The wing scan lights and engine scan lights are controlled by toggle switch
R WING (2LX) on panel 426VU.

4. Operation (Ref. Fig. 002)
When the busbars are energized and the circuit breakers closed, 28 V DC is supplied to the power relays (11LX) via toggle switch (2LX).
Placing the switch (2LX) in the WING position, power relay (11LX) is energized which supplies 28 V DC to the engine scan lights (9LX, 10LX) and 115 V AC to the wing scan lights (7LX, 8LX). The power relay supplies 115 V AC to the stepdown transformers which reduce the voltage to 13 V AC and the wing scan lights come on.



NOTE:
WY = 31-69-00 CIRCUIT BREAKER MONITORING SYSTEM

B M 6 33 49 00 0 ACN 01

Wing and Engine Scan Light - Schematic
Figure 002

R

1. Operational Test

A. Reason for the Job
Operational test of wing and engine scan lights

B. Equipment and Materials

ITEM	DESIGNATION
(1)	Electrical Ground Power Unit - 3-Phase, 115/200V AC, 400 Hz
Referenced Procedure - 24-41-00, P. Block 301	AC External Power Control

C. Procedure
(1)Job Set-Up
(a)Connect electrical ground power unit and energize aircraft electrical network (Ref. 24-41-00, P. Block 301).
(b)Make certain that electronic racks ventilation is correct.
(c)Make certain that the following circuit breakers are closed:

PANEL	SERVICE	IDENT.	LOCATION
132VU	LIGHTING-EXTERIOR LT-WING L	6LX	M73
132VU	LIGHTING-EXTERIOR LT-WING R	1LX	M74
132VU	LIGHTING-EXTERIOR LT-ENG R	4LX	P74
132VU	LIGHTING-EXTERIOR LT-ENG L	5LX	P73

(2)Test

ACTION	RESULT
1. EXT LT control panel 426VU: - place toggle switch, WING (2LX) to position WING.	Zones 231, 232: - wing scan lights 7LX and 8LX come on. Zones 121, 122: - engine scan lights 9LX and 10LX come on.
2. EXT LT control panel 426VU: - place toggle switch, WING (2LX) to OFF position.	- wing and engine scan lights go off.

(3)Close-Up
(a)De-energize aircraft electrical network and disconnect ground power unit (Ref. 24-41-00, P. Block 301).

R **WARNING** : BEFORE POWER IS SUPPLIED TO THE AIRCRAFT, MAKE CERTAIN THAT
R ELECTRICAL CIRCUITS UPON WHICH WORK IS IN PROGRESS ARE ISOLATED.

R **WARNING** : ISOPROPYL-ALCOHOL (MATERIAL NO. 11-010) IS DANGEROUS AVOID
R INHALING FUMES. USE IN WELL VENTILATED AREA ONLY.
R ISOPROPYL ALCOHOL (MATERIAL NO. 11-010) IS HIGHLY FLAMMABLE.
R ISOPROPYL ALCOHOL (MATERIAL NO. 11-010) IS A SKIN IRRITANT. WEAR
R PROTECTIVE GLOVES OR USE A BARRIER CREAM. WASH IMMEDIATELY WITH CLEAN
R WATER IF SKIN IS SPLASHED WITH SOLVENT. MANUFACTURER'S INSTRUCTIONS
R MUST BE FOLLOWED.

1. Reason for the Job

A. Replacement of light beam unit and lamp housing

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, Adjustable, 5 m (16.40 ft.)
R B. Material No. 11-010	Cleaning Agents (Ref. 20-31-00)
C. Material No. 09-016	Sealants (Ref. 20-31-00)
D.	Electrical Ground Power Unit - 3-Phase, 115/200 V, 400 Hz
Referenced Procedure - 24-41-00, P. Block 301	AC External Power Control

3. Procedure

A. Job Set-Up
(1)Position access platform.
(2)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
132VU	LIGHTING-EXTERIOR LT-ENG R	4LX	P74
132VU	LIGHTING-EXTERIOR LT-ENG L	5LX	P73

B. Removal
(1)Light beam unit
(a)Loosen quick-release fasteners (1) and remove cover plate (2) from lamp housing (3).
(b)Loosen screws (4) from lamp housing (3).
(c)Remove light beam unit (5) and disconnect electrical wires (6).
(2)Lamp Housing
(a)Loosen screws (7) from lamp housing (3).
(b)Remove lamp housing (3) from fuselage (8).
(c)Remove the used sealants from the lamp housing (3) and the fuselage (8)

with a non-metallic scraper.

C. Preparation for Installation

R WARNING : CLEANING AGENT (MAT. NO. 11-010) IS DANGEROUS.

R (1)Clean all parts with a cloth moist with isopropyl alcohol (Material
R No. 11-010). Clean the autotransformer assy, the connector assy, the
R lamp housing and the name plate with low pressure compressed air only.
R Fully clean the lamp terminals and remove corrosion from the lugs with
R emery cloth.

D. Installation
(1)Lamp Housing

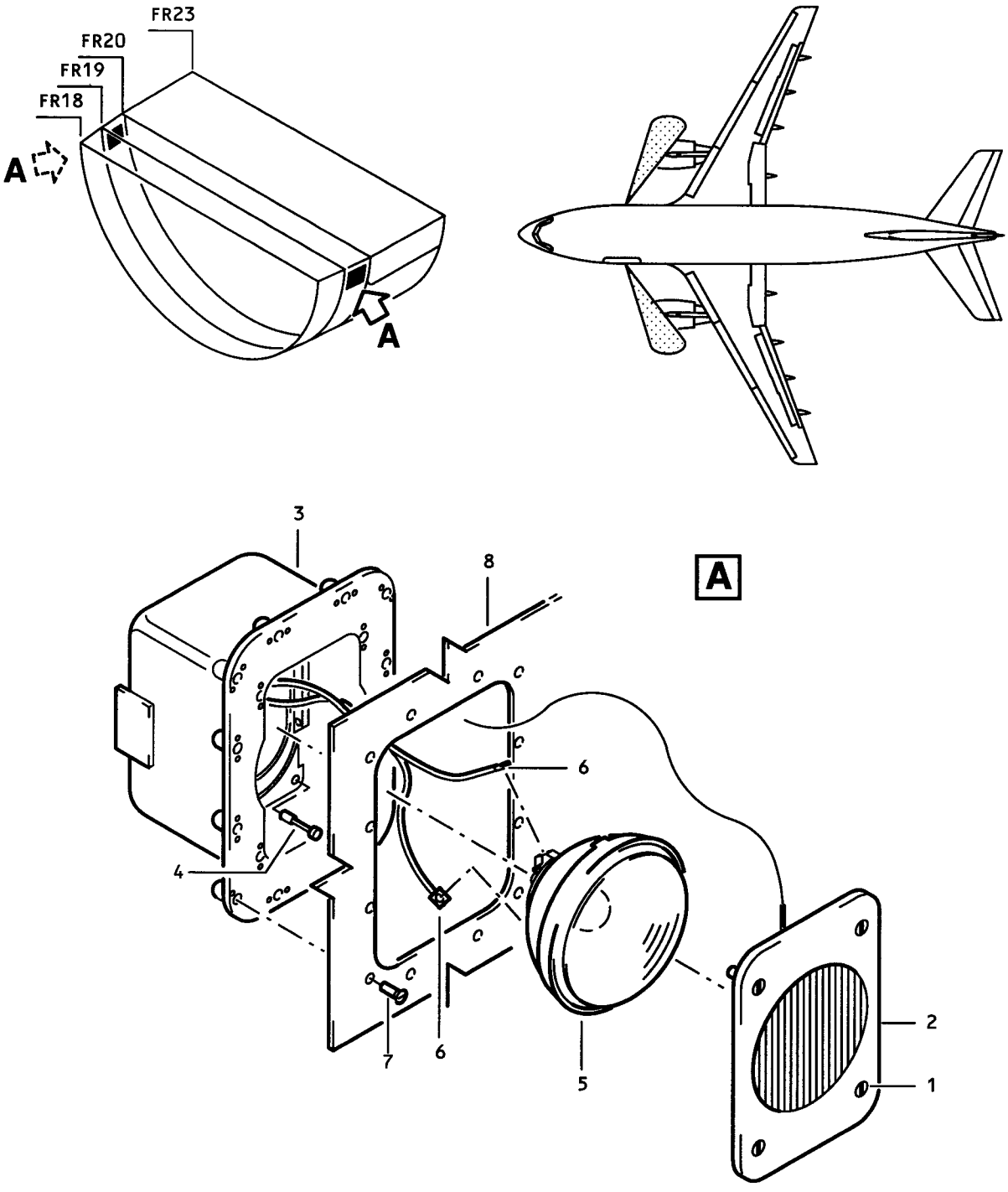
NOTE : Make certain that the drain holes located in the bottom of the engine scan lights are not blocked up, so that water condensation can drain away.

(a)Apply sealants (Mat. No. 09-016) to the lamp housing (3) and on the fuselage (8).
(b)Position lamp housing (3).
(c)Fasten screws (7) on lamp housing (3).
(2)Light beam unit
(a)Position light beam unit (5) and connect electrical wires (6).
(b)Install screws (4) on lamp housing (3).
CAUTION : MAKE CERTAIN THE COVER PLATE TO BE FITTED IS COMPATIBLE WITH THE LIGHT UNIT. AN ARROW ENGRAVED ON THE GLASS INDICATES THE LIGHT BEAM DIRECTION.
(c)Install cover plate (2) with quick-release fasteners (1) on lamp housing (3).
(Ref. Fig. 201)

E. Test
(1)Connect electrical ground power unit and energize aircraft electrical network (Ref. 24-41-00, P. Block 301).
(2)Remove safety clips and tags and close circuit breakers 4LX and 5LX.

ACTION	RESULT
1. On panel 426VU: - place toggle switch (2LX) to position WING.	Zones 121, 122: - engine scan lights come on.
- place toggle switch to OFF position.	- engine scan lights go off.

F. Close-Up
(1)De-energize aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).
(2)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.



Engine Scan Light
Figure 201

R

(3)Remove access platform.

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R ELECTRICAL CIRCUITS UPON WHICH WORK IS IN PROGRESS ARE ISOLATED.

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R WATER IF SKIN IS SPLASHED WITH SOLVENT. MANUFACTURER'S INSTRUCTIONS
R MUST BE FOLLOWED.

1. Reasons for the Job

A. Replacement of light beam unit, autotransformer and lamp housing

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, Adjustable, 5 m (16.4 ft.)
R B. Material No. 11-010	Cleaning Agents (Ref. 20-31-00)
R C. Material No. 09-016	Sealants (Ref. 20-31-00)
R D.	Electrical Ground Power Unit - 3-Phase, 115/200 V, 400 Hz
Referenced Procedure - 24-41-00, P. Block 301	AC External Power Control

3. Procedure

A. Job Set-Up
(1)Position access platform.
(2)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
132VU	LIGHTING-EXTERIOR LT-WING R	1LX	M74
132VU	LIGHTING-EXTERIOR LT-WING L	6LX	M73

B. Removal
(1)Light Beam Unit
(a)Loosen quick-release fasteners (1) and remove cover plate (2) from lamp housing (3).
(b)Loosen screws (4) and remove upper yoke (5).
(c)Remove light beam unit (6) and disconnect electrical wires (7).
NOTE : If flange (9) is applicable, the following step (d) is necessary.
(d)Loosen screws (8) and remove flange (9) from lamp housing (3).
(2)Autotransformer

(a)Remove screws (10) from lamp housing (3).
(b)Remove autotransformer (11) and unsolder electrical wires (12).

(3)Lamp Housing
(a)Loosen screws (13) from lamp housing (3).
(b)Remove lamp housing (3) from fuselage (14).
(c)Remove the used sealants from the lamp housing (3) and the fuselage (14) with a non-metallic scraper.

C. Preparation for Installation

WARNING : CLEANING AGENT (MAT. NO. 11-010) IS DANGEROUS.

(1)Clean parts with a cloth moist with isopropyl alcohol (Material No. 11-010). Clean the autotransformer assy, the connector assy, the lamp housing and the name plate with low pressure compressed air only. Fully clean the lamp terminals and remove corrosion from the lugs with emery cloth.

D. Installation
(1)Lamp Housing

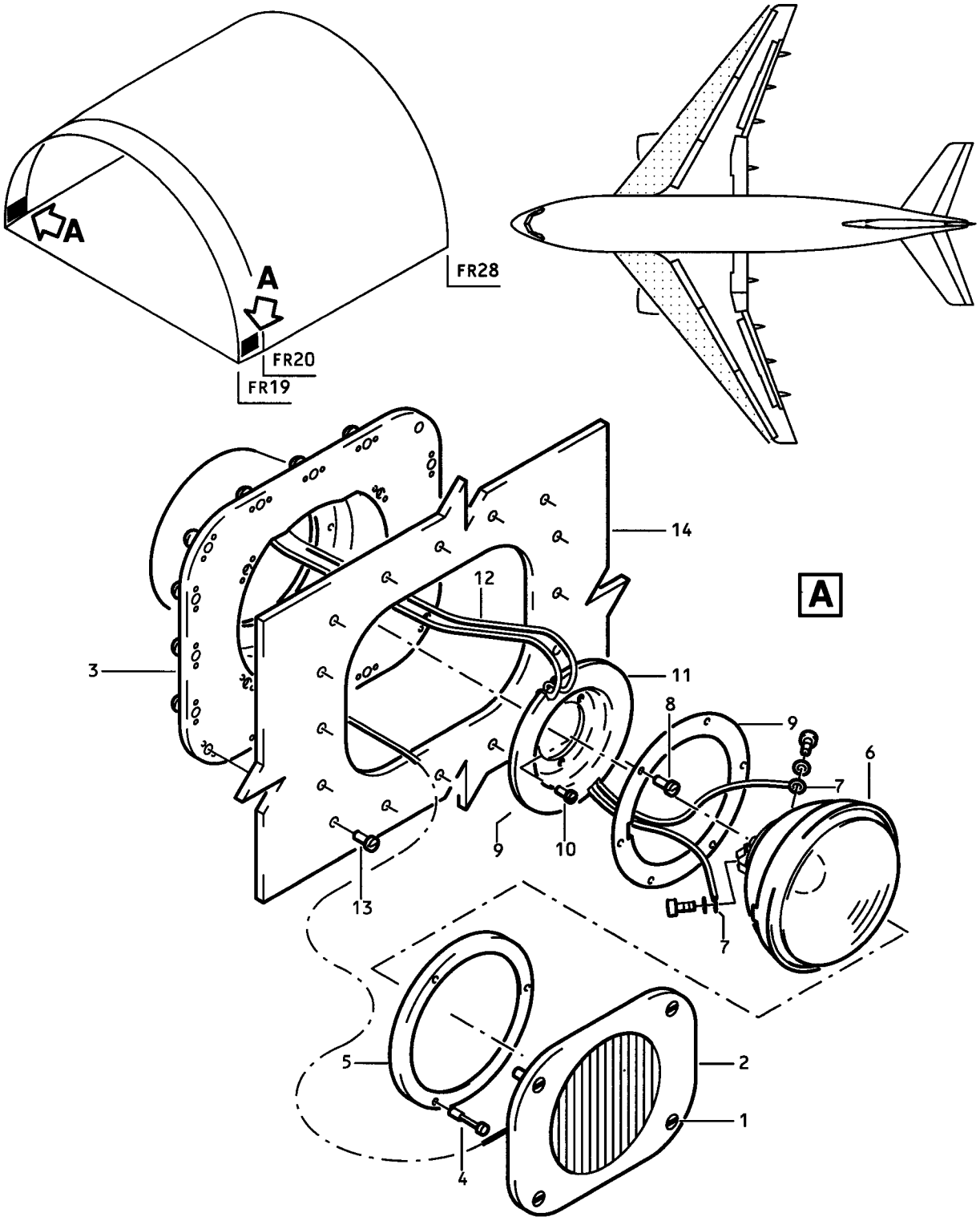
NOTE : Make certain that the drain holes located in the bottom of the wing scan lights are not blocked up, so that water condensation can drain away.

(a)Apply sealants (Mat. No. 09-016) to the screws (13), lamp housing (3) and on the fuselage (14).
(b)Position lamp housing (3).
(c)Fasten screws (13) on lamp housing (3).

(2)Autotransformer
(a)Position autotransformer (11) and solder electrical wires (12).
(b)Install screws (10) on lamp housing (3).

(3)Light Beam Unit
NOTE : If flange (9) is applicable, the following step (a) is necessary.
(a)Position flange (9) and install with screws (8) on lamp housing (3).
(b)Position light beam unit (6) and connect electrical wires (7).
(c)Position yoke (5) and install with three screws (4).
CAUTION : MAKE CERTAIN THAT THE COVER PLATE TO BE FITTED IS COMPATIBLE WITH THE LIGHT UNIT. AN ARROW ENGRAVED ON THE GLASS INDICATES THE LIGHT BEAM DIRECTION.
(d)Install cover plate (2) with quick-release fasteners (1) on lamp housing (3).
(Ref. Fig. 201)

E. Test
(1)Connect electrical ground power unit and energize aircraft electrical network (Ref. 24-41-00, P. Block 301).
(2)Remove safety clips and tags and close circuit breakers 1LX and 6LX.



Wing Scan Light
Figure 201

ACTION	RESULT
1. On panel 426VU: - place toggle switch (2LX) to position **WING.** - place toggle switch to **OFF** position.	Zones 231, 232: - wing scan lights come on. - wing scan lights go off.

F. Close-Up
(1)De-energize aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).
(2)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(3)Remove access platform.

1. General

The emergency lighting system provides for:

A. Illumination of the passenger compartment and exit areas in event of failure of normal lighting system.

B. Illumination of an EXIT location, and EXIT marking sign at each of the passenger doors and emergency exits.

C. Illumination of floor proximity escape path marking lights to provide low level illumination of the passenger routes to, and location of, the passenger and emergency exit doors

D. Illumination of the lavatories, independent of the main lavatory lighting system.

E. Illumination of each overwing escape slide/slide raft, when overwing emergency exit doors are opened.

**ON A/C ALL

R

2. Description

A. The emergency lighting system consists of:

(1)6 V emergency ceiling lights distributed throughout the passenger compartment. The lights can be switched on from the flight compartment or from the purser's panel.

(2)6 V EXIT location and EXIT marking signs. These signs are located at each passenger door and emergency exit. The signs can be switched on from the flight compartment or from the purser's panel. Circuitry is provided to enable the signs to be controlled from the NO SMOKING switch or landing gear.

(3)Emergency power supply units (EPSUs) 29WL containing electronic logic and amplifying circuits, internal battery pack, 115 V AC to 7 V DC converter for battery charging, battery heating circuit to heat the battery when the ambient temperature falls below +20 °C, 28 V DC to 6 V DC converter to supply lights and signs while busbar power is available and a test circuit which includes a TEST pushbutton and two light-emitting diodes (LEDs). The unit can be tested by pressing the TEST pushbutton. If the unit and associated loads are serviceable the green LED glows, if the unit or any associated load is unserviceable the red LED will glow.

(4)Pushbutton switch EMERG on the purser's panel controls the entire system. When pressed all emergency lights come on and the pushbutton integral light is illuminated.

(5)Pushbutton switch EMERG TEST on the purser's panel, enables a complete

serviceability test of the power supply units (29WL) and associated loads. When pressed, the switch completes a ground for the EPSUs (29WL) test circuit and when all EPSUs and their associated loads

(6) Lavatory auxiliary lighting consists of a 28 V lamp in each lavatory, which illuminates when the battery busbar is energized and the associated TOILETS circuit breaker is closed.

(7) Switch EMER EXIT LT on the overhead panel in the flight compartment controls the system functioning. The switch positions are:

(a) DISARM: in this position, when aircraft power is available the DISARM indicator light on panel 436VU is illuminated. When aircraft power is not available the EPSUs are disabled and the emergency lighting remains off.

(b) ARM: in this position failure of main aircraft 115 V AC normal power supply will ground the EPSUs 'on control' line and all emergency lights come on.

(c) ON: in this position the EPSUs 'on control' line is grounded and all emergency lights come on. Power for the emergency ceiling lights, EXIT location signs and EXIT markers is supplied from the 28 V DC battery busbar; when the battery busbar fails, power is automatically supplied by the EPSUs 29WL integral battery pack. Power for the floor proximity escape path marking lights is supplied at all times by the battery pack in each EPSU 110WL.

(8) Floor proximity escape path marking lights (floor-mounted lights strips wall-mounted EXIT identifiers and wall-mounted flood lights) which provide low level illumination of the passenger escape routes to, and location of, the passenger and emergency exit doors. The floor proximity escape path marking lights come on with the emergency lighting system.

(9) Emergency power supply units (EPSUs) 110WL containing electronic logic, an internal battery and a 28 V DC to 6 V DC charging circuit. Each power supply unit supplies a number of floor escape path marking strips, EXIT identifiers and flood lights.

(10) The EXIT identifier, located in the door frame linings of each passenger and overwing emergency exit door are illuminated whenever the light strips are on.

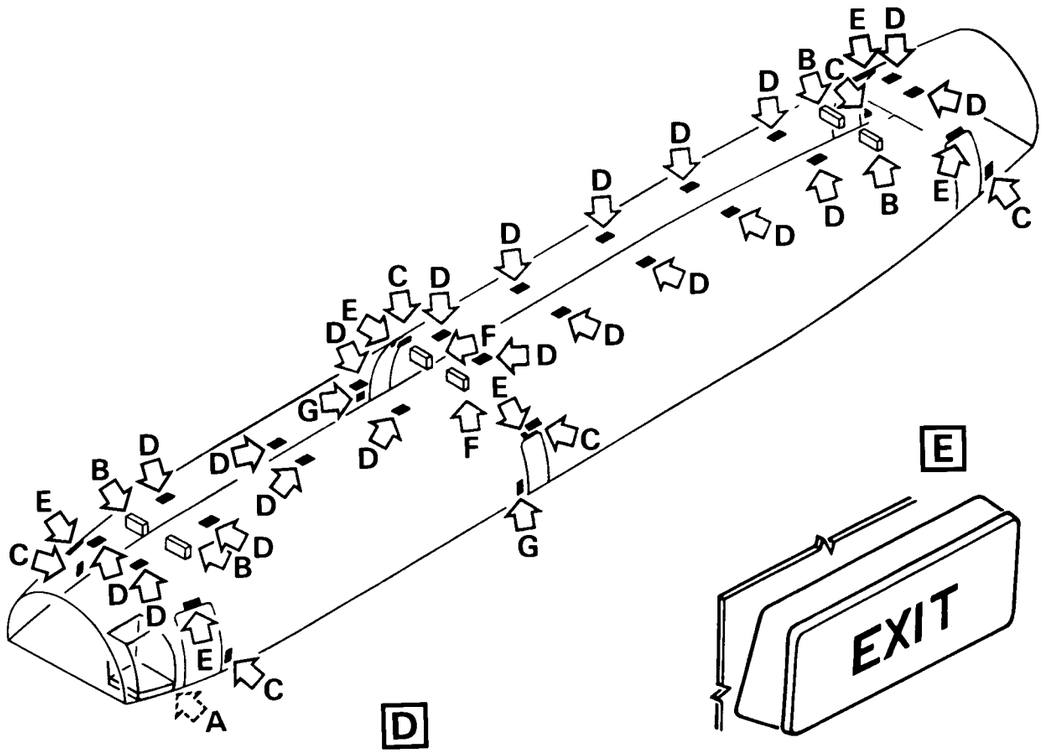
(11) The light strip, installed at the edge of the outer aisles and in the door areas, come on whenever switch EMER EXIT LT (22WL) is selected to ON or when battery busbar power is lost while switch EMER EXIT LT (22WL) is selected to ARM

(12) The wall-mounted flood lights, installed at various locations in the passenger compartment, come on whenever the light strips are on.

(13) 6 V overwing emergency lights located in each emergency exit door frame. The lights are supplied, at all times, from the associated EPSU (29WL) integral battery pack. Each light is automatically switched on when the overwing emergency exit doors are opened with the emergency lighting system activated.

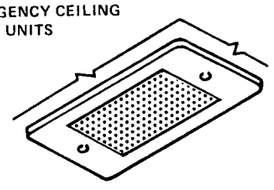
R **ON A/C 101-200,

(Ref. Fig. 001)



D

EMERGENCY CEILING LIGHT UNITS



E

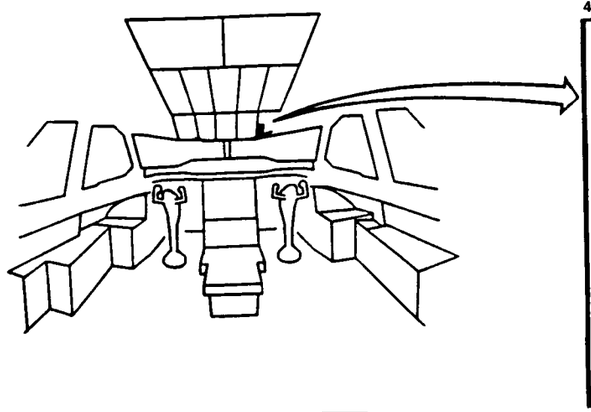
EXIT MARKING SIGNS

F

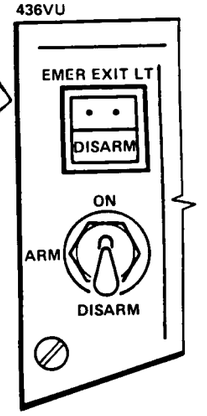
CEILING–MOUNTED EXIT LOCATION SIGNS (DOUBLE SIDED)

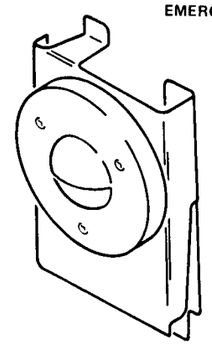
G

OVERWING EMERG. LIGHT



FLIGHT DECK CONTROL PANEL 436VU





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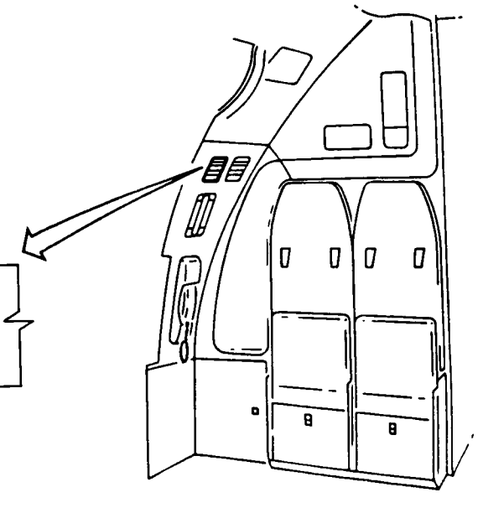
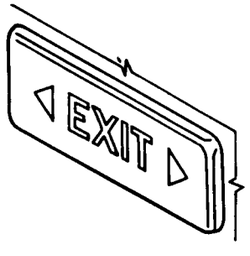


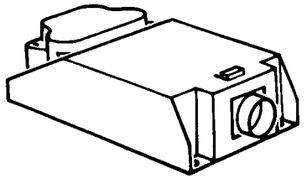
B

WALL–MOUNTED EXIT LOCATION SIGNS (SINGLE SIDED)

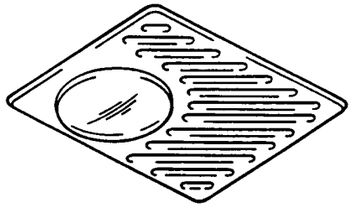


C

POWER SUPPLY UNITS



TYPICAL LAVATORY AUXILIARY LIGHTS



BM6 33 50 00 0 AAFO 00

Emergency Lighting - Location
Figure 001

**ON A/C 001-005,

(Ref. Fig. 002)

R **ON A/C 001-100,

(Ref. Fig. 003)

R **ON A/C 101-200,

R (Ref. Fig. 004)

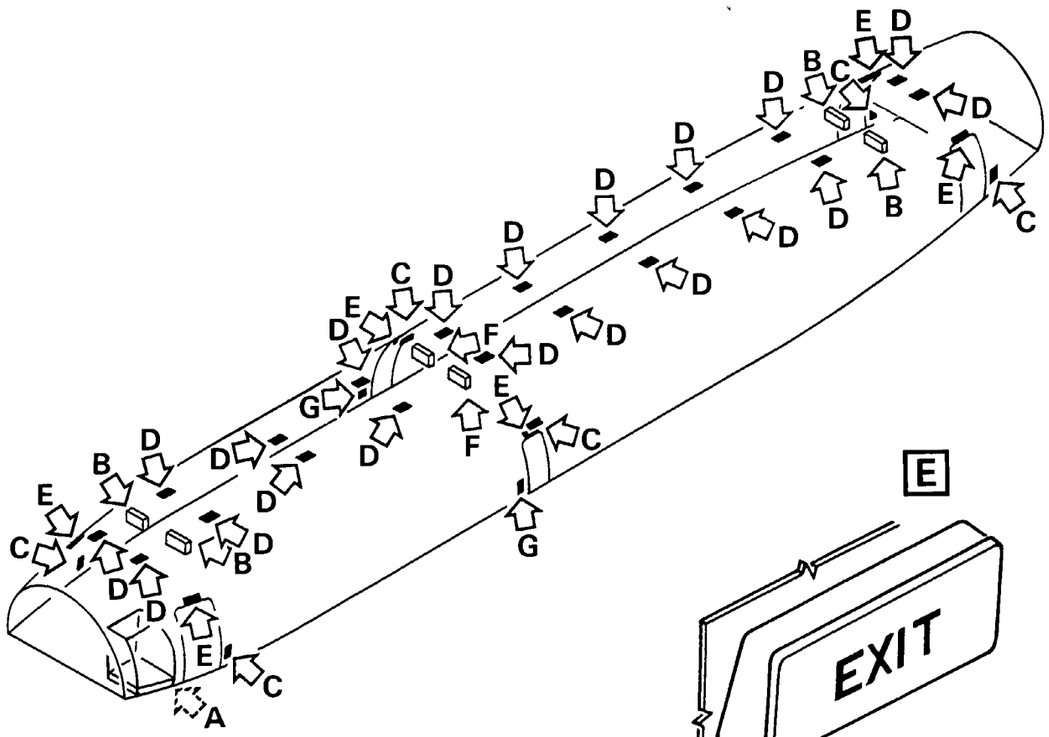
R **ON A/C 006-200,

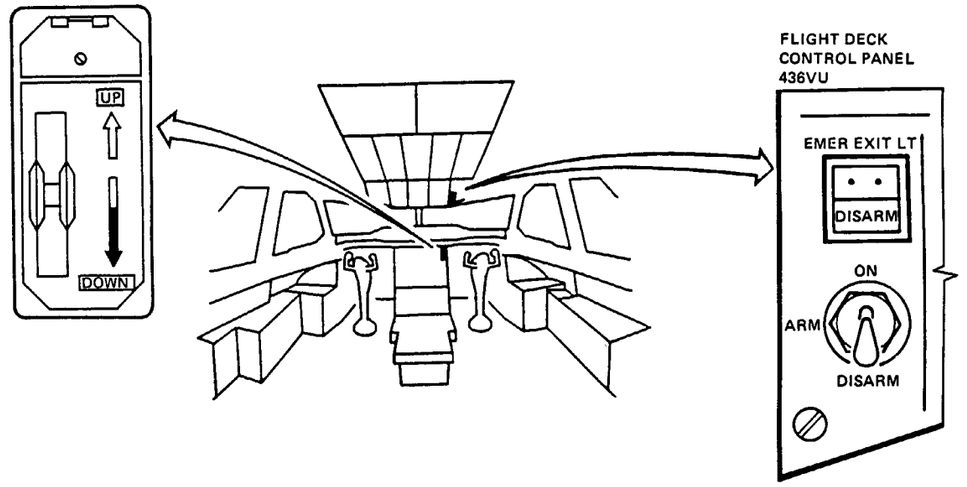
(Ref. Fig. 005)

**ON A/C 001-005,

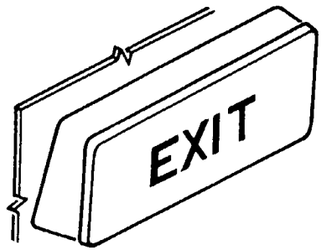
(Ref. Fig. 006)

INTENTIONALLY BLANK





E

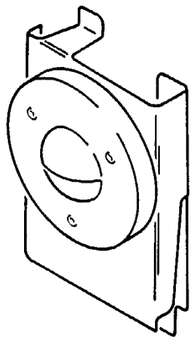


EXIT MARKING SIGNS

F

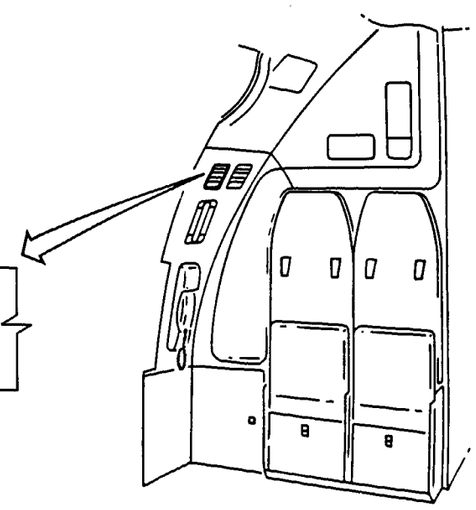
CEILING–MOUNTED
EXIT LOCATION SIGNS
(DOUBLE SIDED)

G

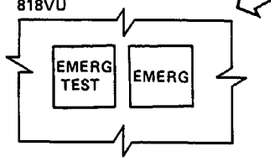


OVERWING
EMERG. LIGHT

A



818VU



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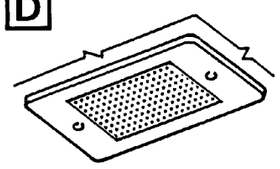
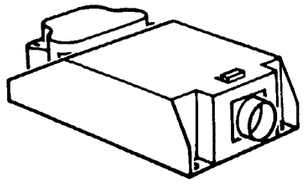


EMERGENCY CEILING
LIGHT UNITS

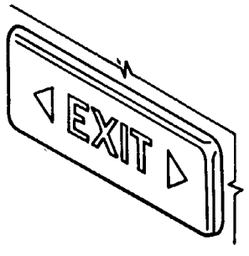
C

POWER SUPPLY UNITS

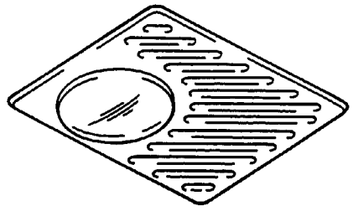


B

WALL–MOUNTED
EXIT LOCATION SIGNS
(SINGLE SIDED)

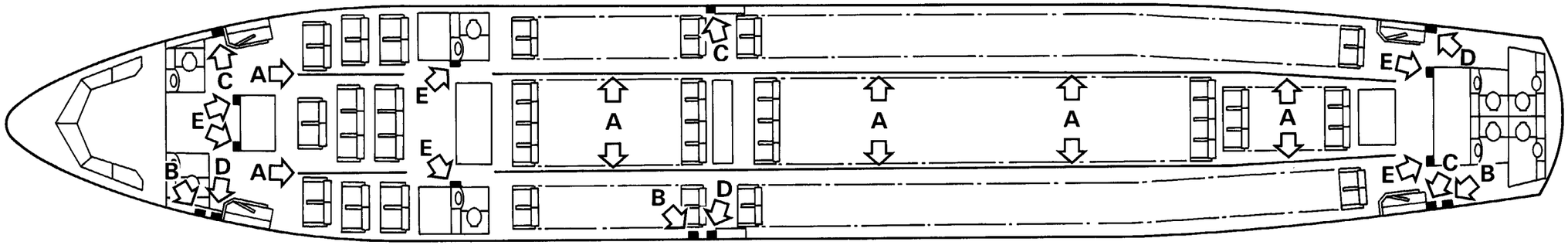


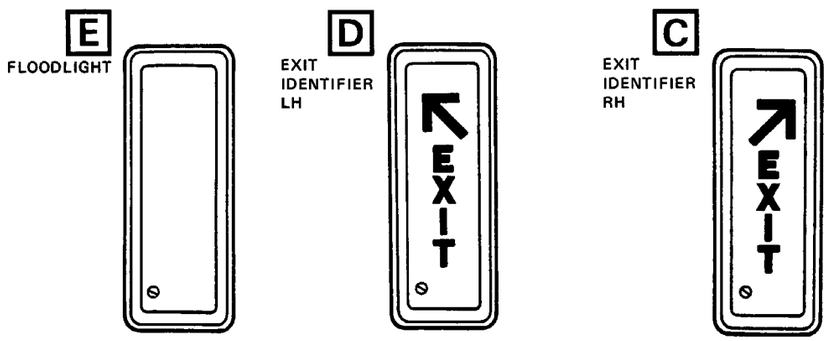
TYPICAL
LAVATORY AUXILIARY
LIGHTS

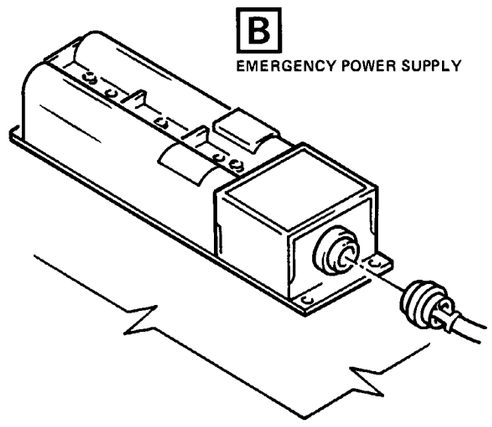


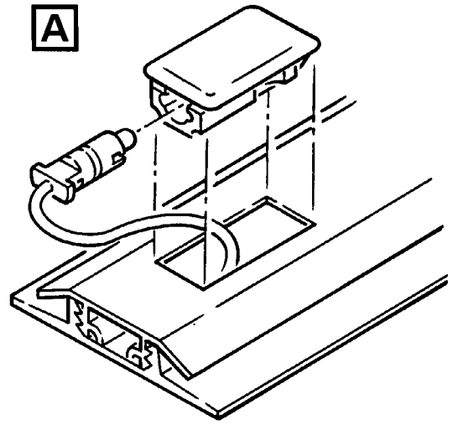
BM6 33 50 00 0 ABE0 00

Emergency Lighting - Location
Figure 002



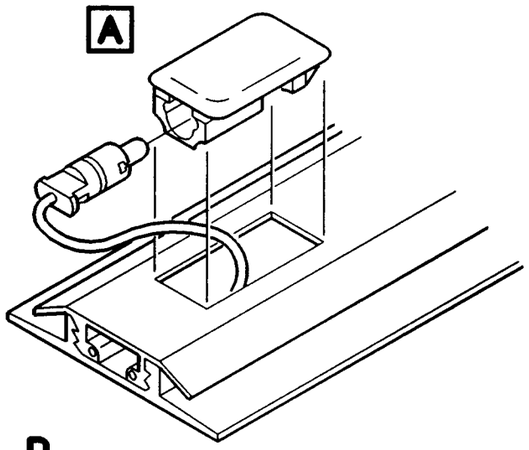


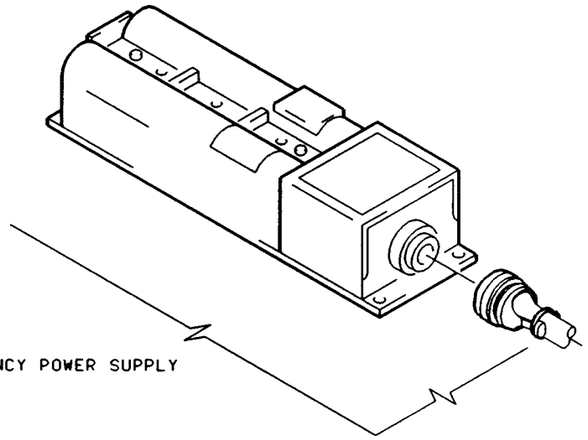


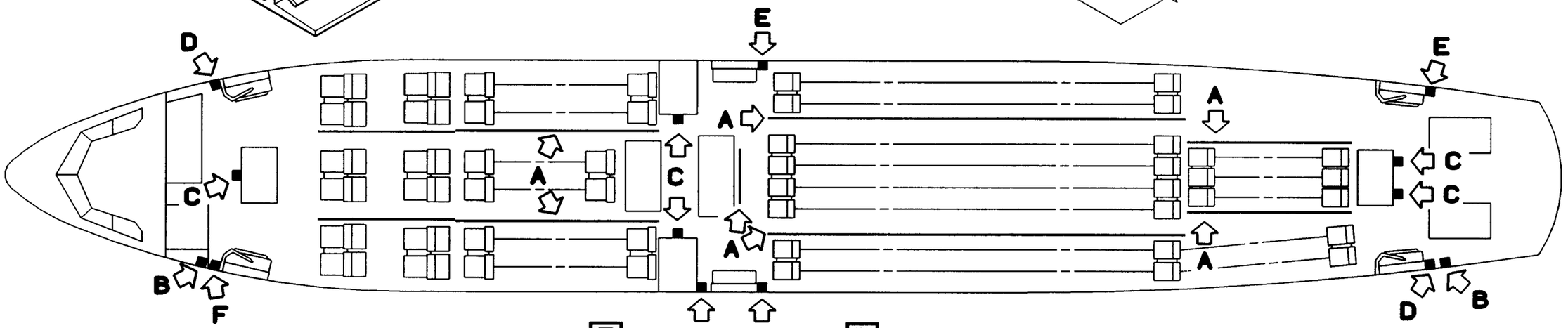


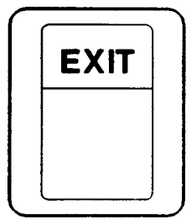
BM6 33 50 00 0 AKAO 00

Emergency Lighting - Location - Floor Proximity
Figure 003





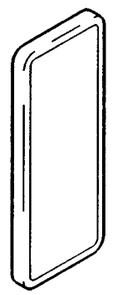




WALL-MOUNTED
EMERGENCY EXIT
MARKER/LIGHT

EXIT IDENTIFIER

EXIT IDENTIFIER

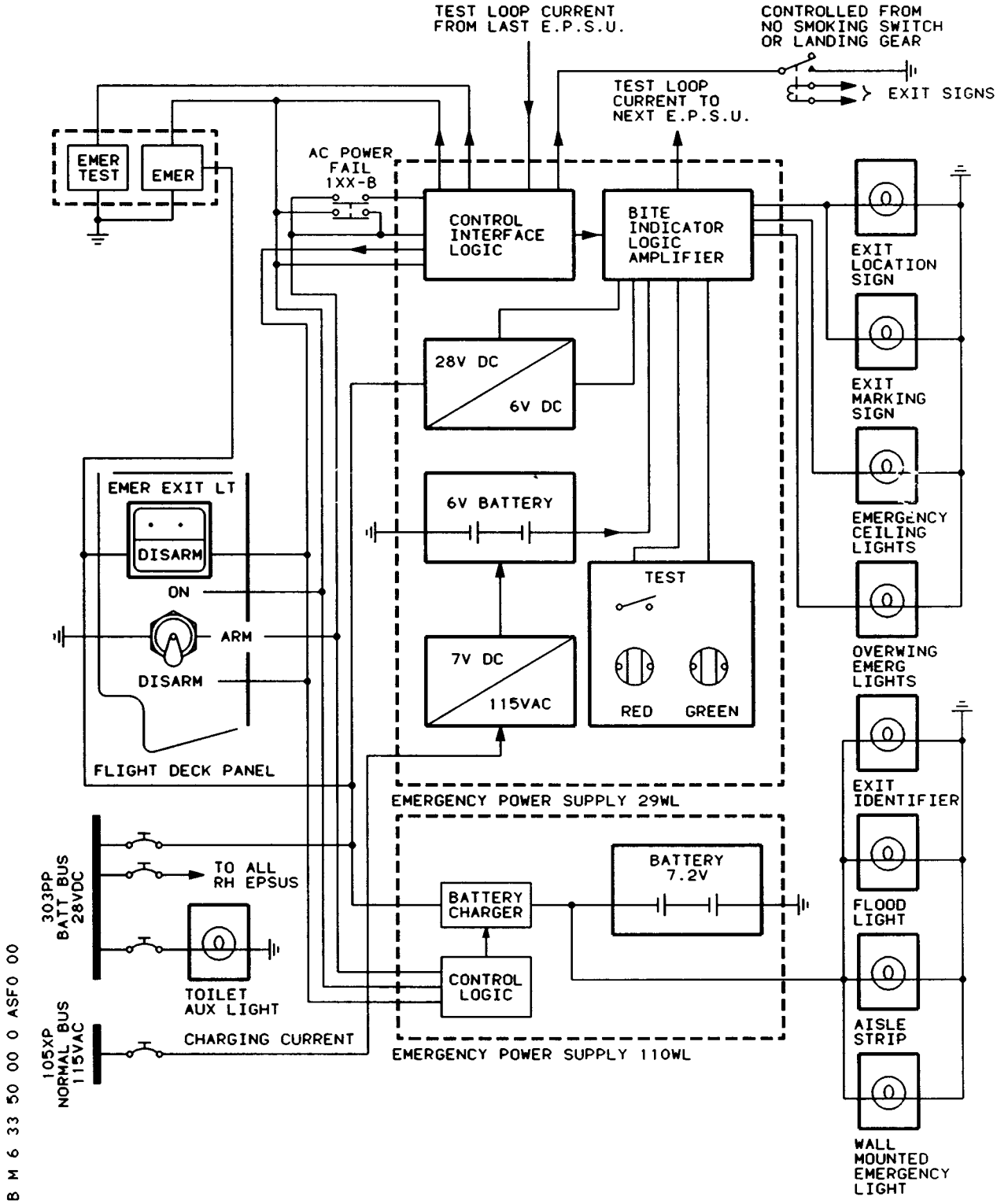


FLOOD LIGHT

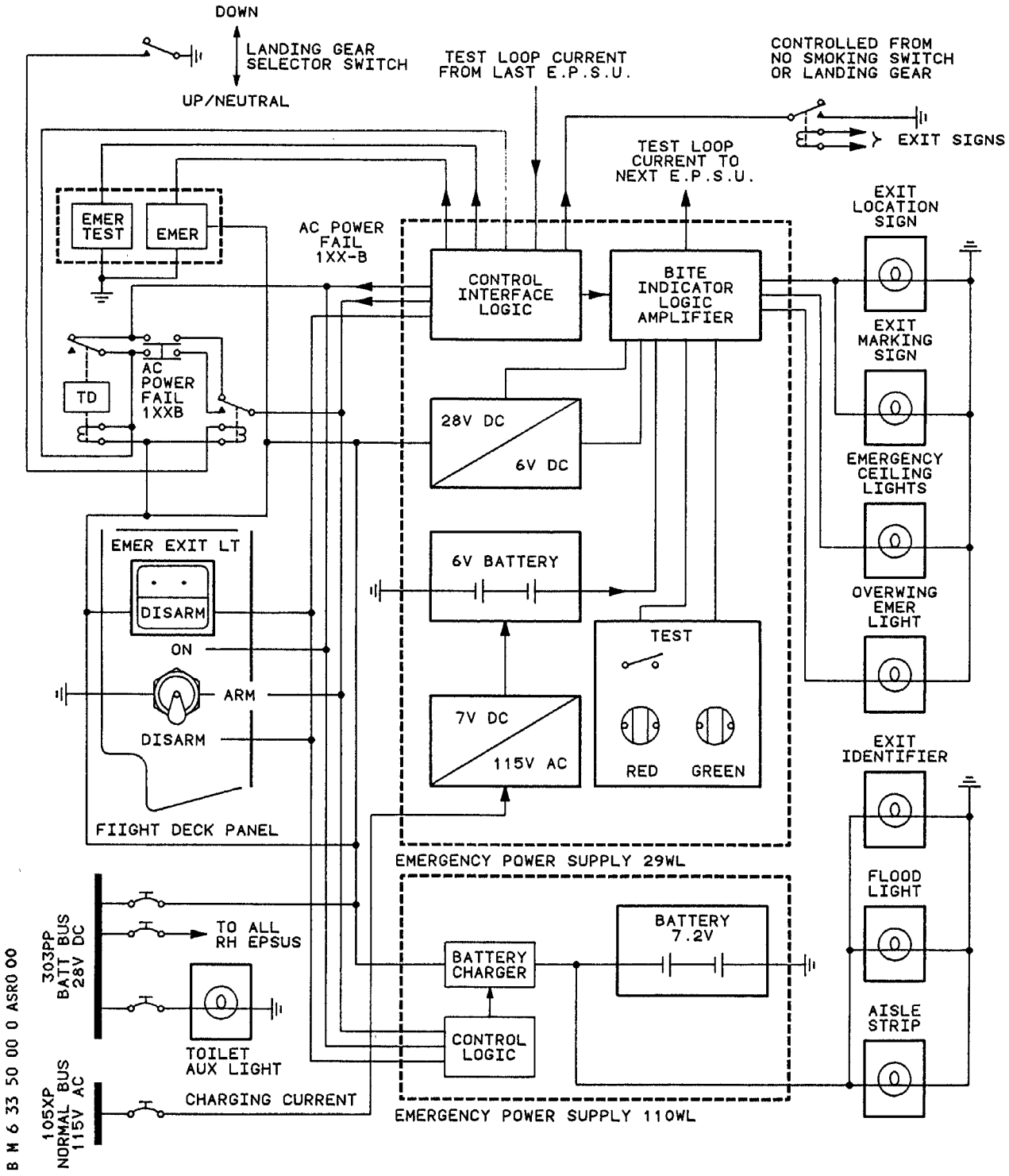
B M 6 33 50 00 0 AKL0 00

R

Emergency Lighting - Location - Floor Proximity
Figure 004



Emergency Lighting - Simplified Schematic
Figure 005



Emergency Lighting - Simplified Schematic
Figure 006

PASSENGER COMPARTMENT EMERGENCY LIGHTING
DESCRIPTION AND OPERATION

1. General

The passenger compartment emergency lighting system provides for the illumination of ceiling units and exit signs in the event of failure of the main lighting system. The emergency lighting system is energized by power supply units, from the 28 V DC busbar or, if there is a failure of the busbar power supply, from 6 V batteries. The system consists of:

- illumination of the passenger compartment during an emergency is provided by ceiling lights, EXIT signs and EXIT markers and overwing emergency lights. The emergency ceiling lights are evenly positioned throughout the compartment and the EXIT signs and EXIT markers indicate the direction and location of the passenger and emergency doors.

- the floor proximity escape path marking light system PEEPLS is installed in the aisle, at each doors, in the door areas and lavatories. The system provides illumination of the passenger routes to the doors, to aid passenger evacuation should smoke obscure normal emergency lighting.

- an auxiliary ceiling light located in each lavatory is supplied directly from the 28 V DC battery busbar.

- the overwing emergency lights, installed one in each emergency exit door frame, provide illumination of the emergency exit and overwing area when the emergency lighting system is activated and the emergency exit doors are opened while armed.

2. Component Location

**ON A/C ALL

(Ref. Fig. 001)

R **ON A/C 001-100,

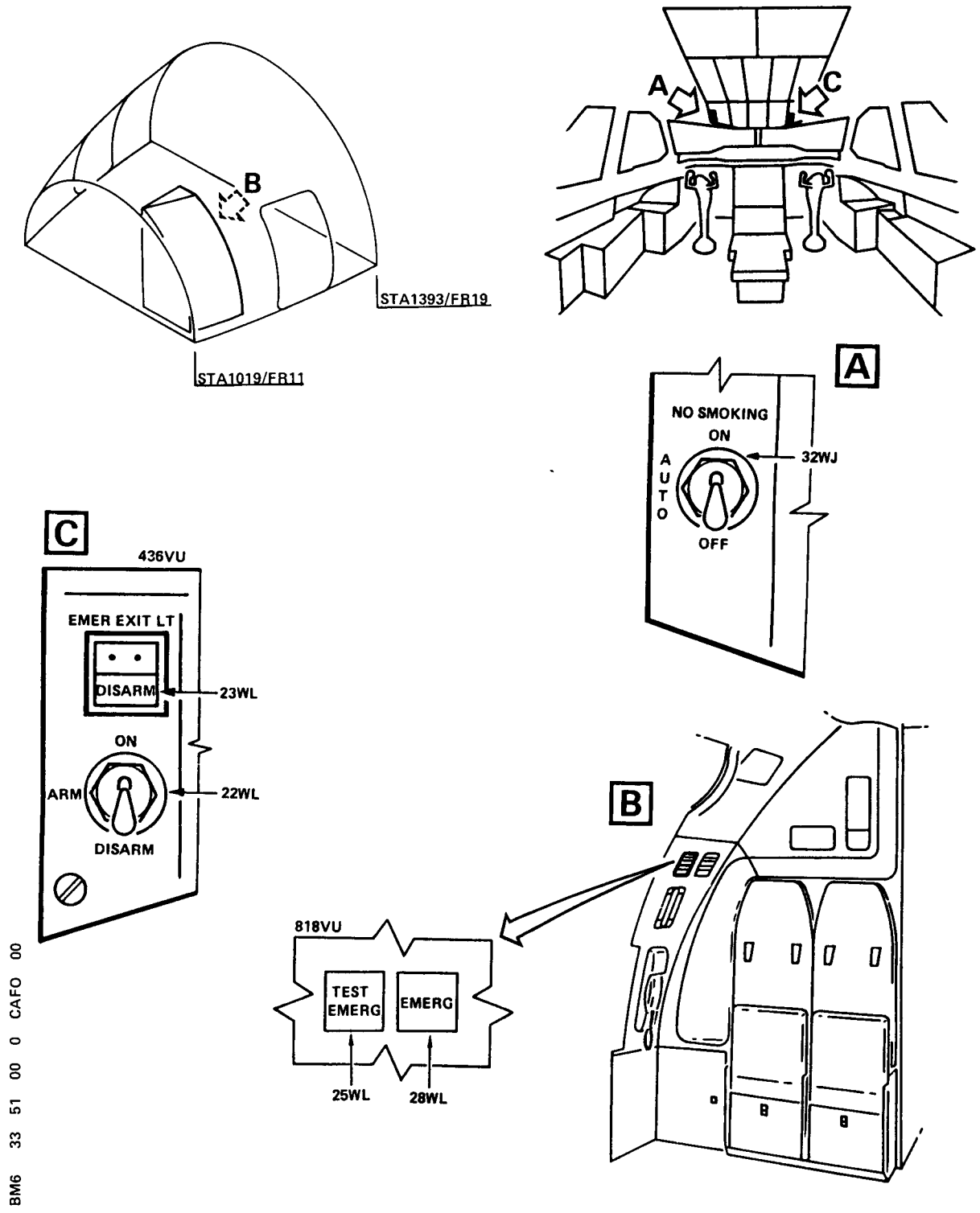
(Ref. Fig. 002)

R **ON A/C 101-200,

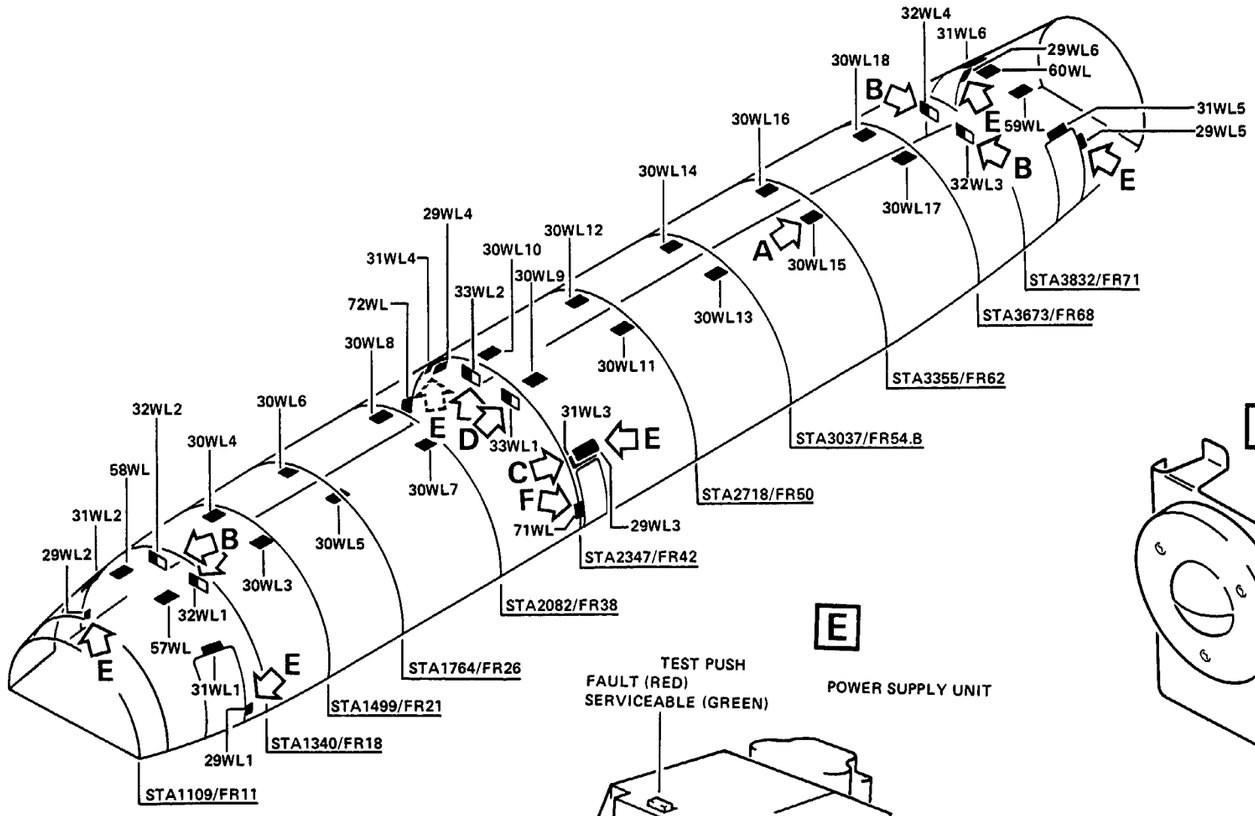
R (Ref. Fig. 003)

R **ON A/C 001-100,

(Ref. Fig. 004)

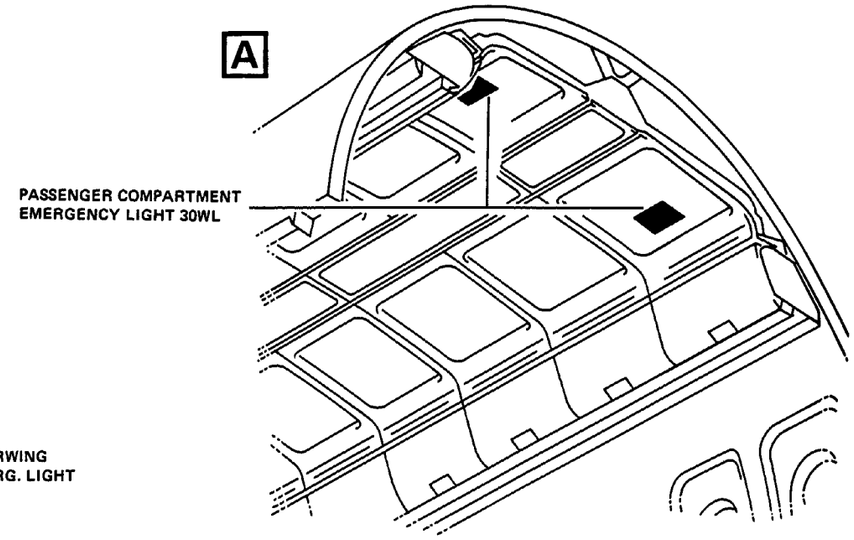


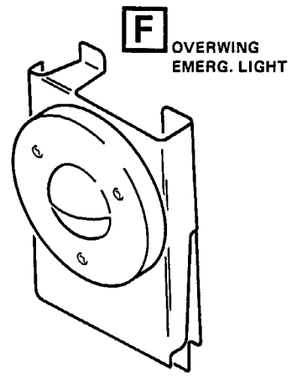
Passenger Compartment Emergency Lighting - Location
Figure 001

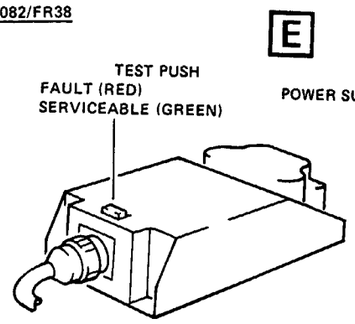


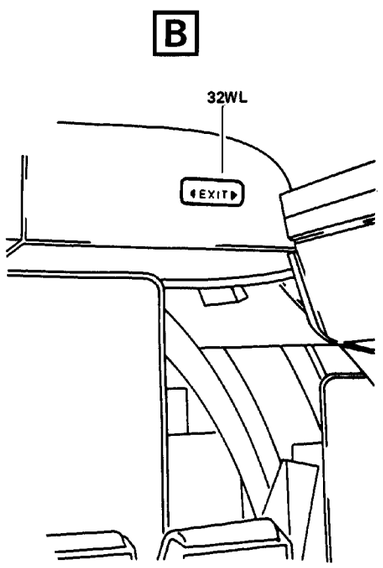
POWER SUPPLY UNITS (P.S.U.)	UNITS CONNECTED TO EACH P.S.U.			
	EMERGENCY CEILING LIGHTS	EXIT LOCATION SIGNS	EXIT MARKING SIGN	OVERWING EMERGENCY LIGHT
29WL1	57WL 30WL4	32WL1	31WL1	
29WL2	58WL 30WL3	32WL2	31WL2	
29WL3	30WL6 30WL7 30WL10 30WL11	33WL1	31WL3	71WL
29WL4	30WL5 30WL8 30WL9 30WL12	33WL2	31WL4	72WL
29WL5	30WL14 30WL15 30WL18 59WL	32WL3	31WL5	
29WL6	30WL13 30WL16 30WL17 60WL	32WL4	31WL6	

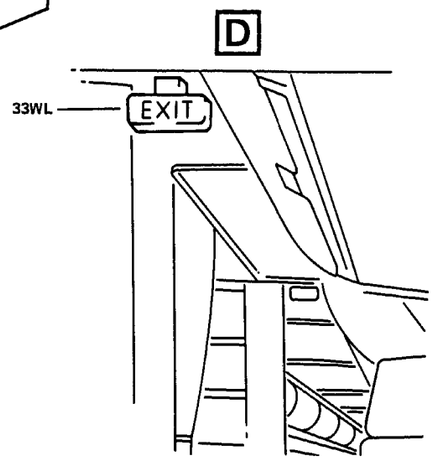
BM6 33 51 00 0 CBBO 00

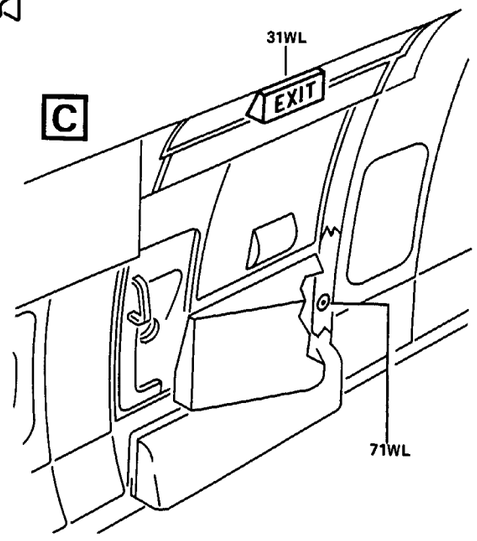




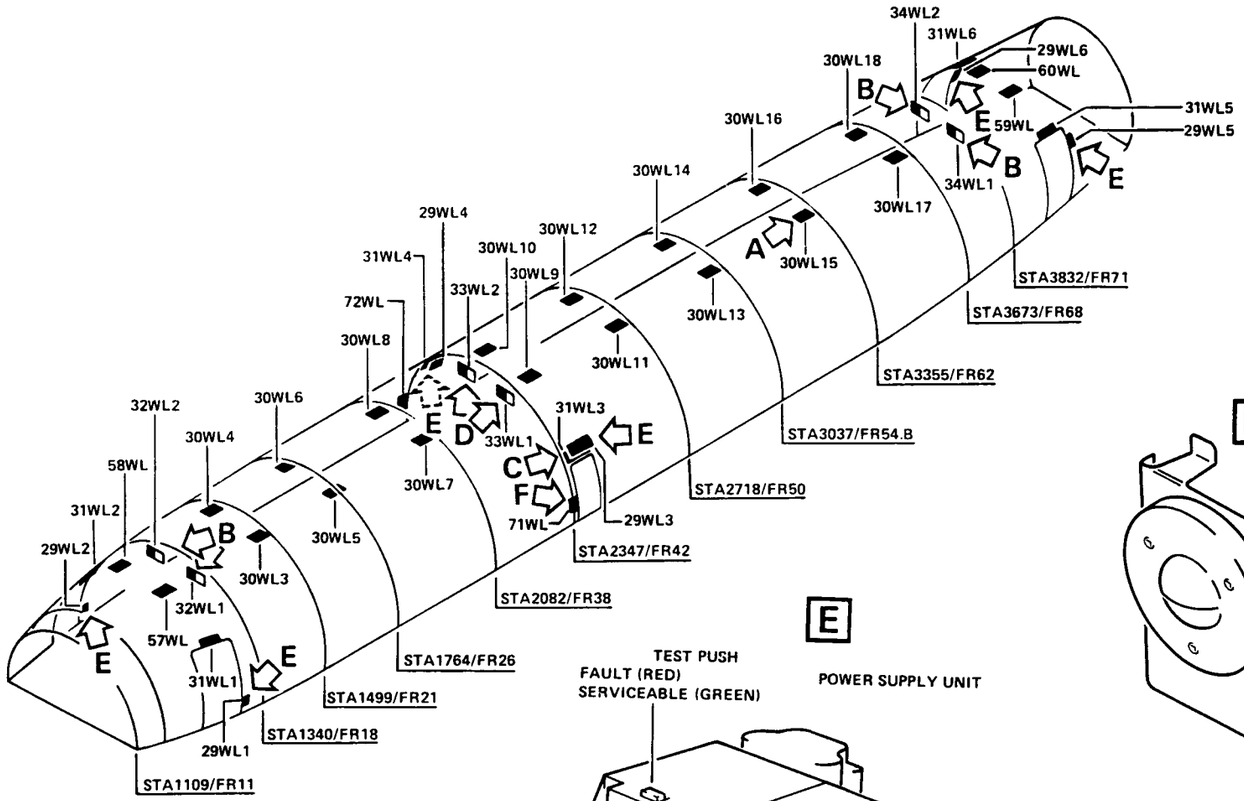


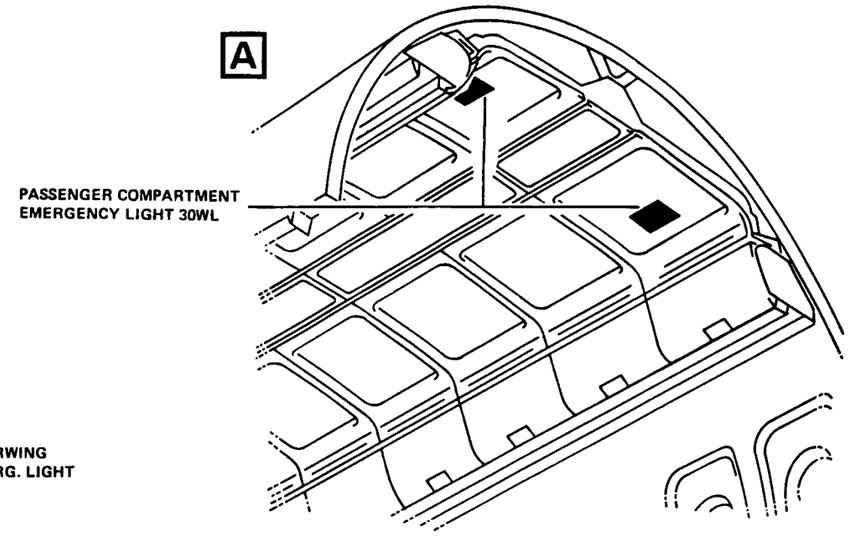


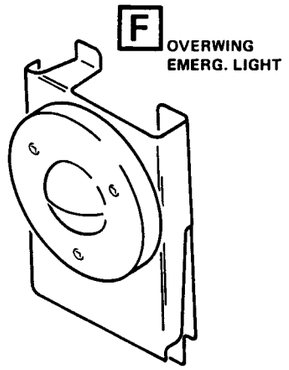


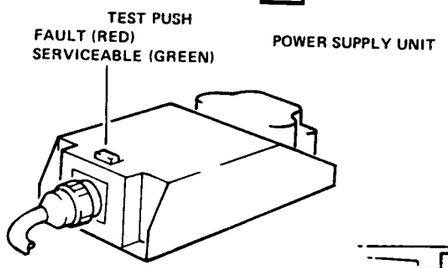


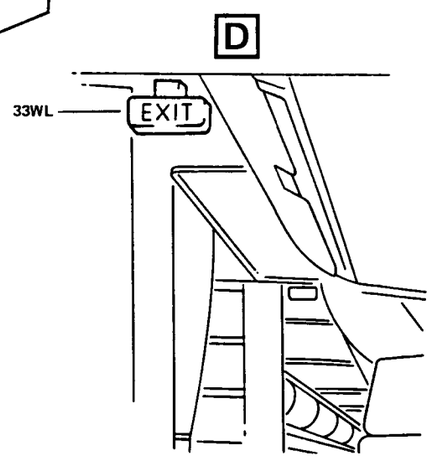
Passenger Compartment Emergency Lighting - Location
Figure 002

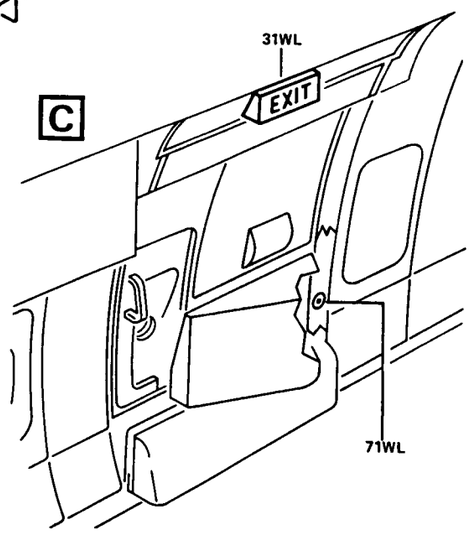


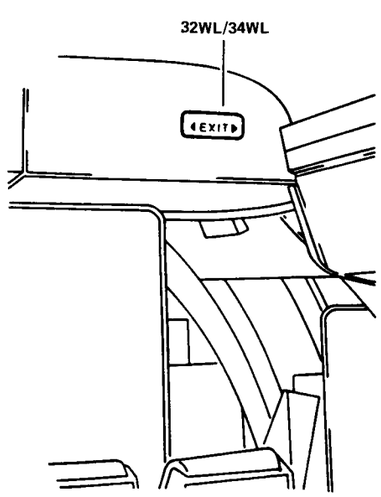










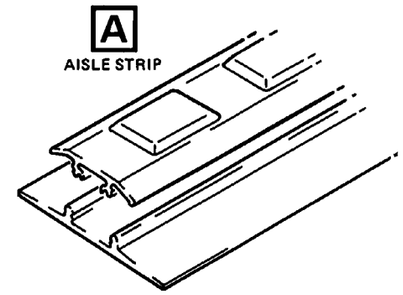


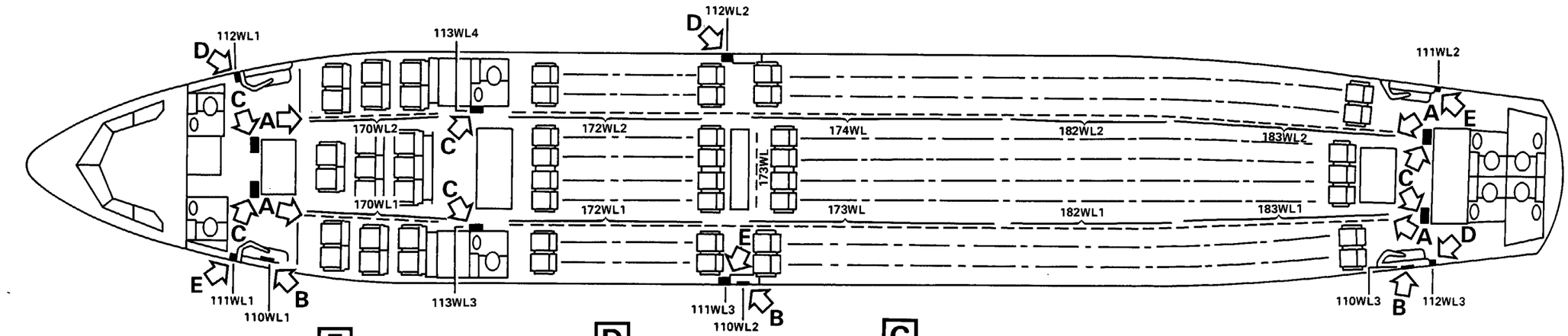
POWER SUPPLY UNITS (P.S.U.)	UNITS CONNECTED TO EACH P.S.U.			
	EMERGENCY CEILING LIGHTS	EXIT LOCATION SIGNS	EXIT MARKING SIGN	OVERWING EMERGENCY LIGHT
29WL1	57WL 30WL4	32WL1	31WL1	
29WL2	58WL 30WL3	32WL2	31WL2	
29WL3	30WL6 30WL7 30WL10 30WL11	33WL1	31WL3	71WL
29WL4	30WL5 30WL8 30WL9 30WL12	33WL2	31WL4	72WL
29WL5	30WL14 30WL15 30WL18 59WL	34WL1	31WL5	
29WL6	30WL13 30WL16 30WL17 60WL	34WL2	31WL6	

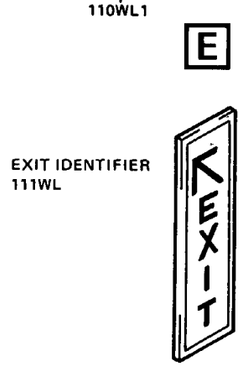
BM6 33 51 00 0 CBDO 00

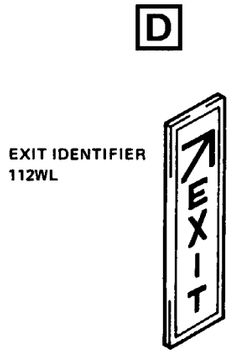
Passenger Compartment Emergency Lighting - Location
Figure 003

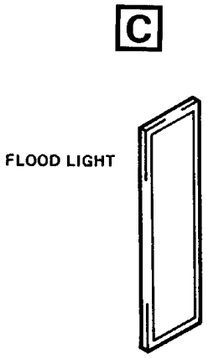
POWER SUPPLY UNITS P.S.U.	UNITS CONNECTED TO EACH P.S.U.		
	EXIT IDENTIFIER	FLOOD LIGHT	AISLE STRIP
110WL1	111WL1 112WL1	GALLEY LIGHT FWD	170WL1 170WL2
110WL2	111WL3 112WL2	113WL3 113WL4	172WL1 172WL2 173WL 174WL
110WL3	111WL2 112WL3	GALLEY LIGHT AFT	182WL1 182WL2 183WL1 183WL2

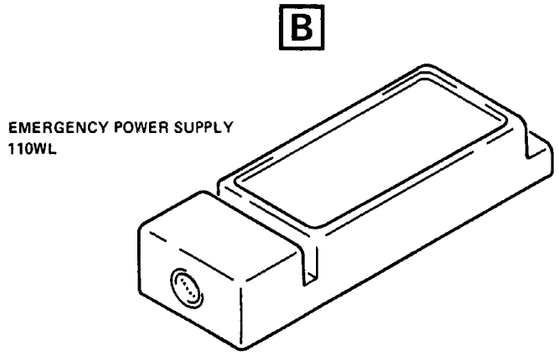












BM6 33 51 00 0 CCEO 00

Passenger Compartment Emergency Lighting - Location
Figure 004

R **ON A/C 101-104,

(Ref. Fig. 005)

R **ON A/C 105-200,

R (Ref. Fig. 006)

R **ON A/C 101-200,

(Ref. Fig. 007)

**ON A/C 001-100,

(Ref. Fig. 008)

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF.
22WL	SWITCH - EMER EXIT LT	436VU	212		
23WL	INDICATOR - EMER EXIT LT DISARM	436VU	212		
25WL	SWITCH PUSHBUTTON - TEST EMERG	818VU	221		
28WL	SWITCH PUSHBUTTON - EMERG	818VU	221		
29WL	POWER SUPPLY UNITS - EMERG		200		33-51-14
	(REF. CORRESPONDING FIG.)				
30WL	PASSENGER COMPT. EMERGENCY LIGHTING		200		33-51-11
	(REF. CORRESPONDING FIG.)				
31WL	DOOR EXIT SIGN - MODULE		200		33-51-13
	(REF. CORRESPONDING FIG.)				
32WL	CEILING EXIT SIGN - MODULE		200		33-51-12
	(REF. CORRESPONDING FIG.)				
33WL	CEILING EXIT SIGN - MODULE		200		33-51-12
	(REF. CORRESPONDING FIG.)				
	LAVATORY AUXILIARY LIGHT		200		33-51-21
	(REF. CORRESPONDING FIG.)				
57WL	PASSENGER COMPT. EMERGENCY LIGHT	849VU	223		33-51-11
58WL	PASSENGER COMPT. EMERGENCY LIGHT	850VU	224		33-51-11
59WL	PASSENGER COMPT. EMERGENCY LIGHT	843VU	263		33-51-11
60WL	PASSENGER COMPT. EMERGENCY LIGHT	842VU	264		33-51-11
71WL	OVERWING EMERGENCY LIGHT		241		33-51-18
72WL	OVERWING EMERGENCY LIGHT		242		33-51-18
110WL	POWER SUPPLY UNITS-EMERG		200		33-51-14
	(REF. CORRESPONDING FIG.)				
111WL	EXIT IDENTIFIER		200		33-51-17
	(REF. CORRESPONDING FIG.)				
112WL	EXIT IDENTIFIER		200		33-51-17
	(REF. CORRESPONDING FIG.)				
113WL	FLOOD LIGHT		200		33-51-17
	(REF. CORRESPONDING FIG.)				
	WALL MOUNTED EMERGENCY LIGHT (GALLEY)		200		33-51-17
	(REF. CORRESPONDING FIG.)				

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF.
114WL	DIODE	786VU	234		
115WL	DIODE	786VU	234		
116WL	DIODE	787VU	244		
117WL	DIODE	787VU	244		
118WL	DIODE	788VU	253		
119WL	DIODE	788VU	253		
170WL	AISLE STRIP		230		33-51-17
	(REF. CORRESPONDING FIG.)				
172WL	AISLE STRIP		230		33-51-17
	(REF. CORRESPONDING FIG.)				
173WL	AISLE STRIP		240		33-51-17
	(REF. CORRESPONDING FIG.)				
174WL	AISLE STRIP		240		33-51-17
	(REF. CORRESPONDING FIG.)				
182WL	AISLE STRIP		250		33-51-17
	(REF. CORRESPONDING FIG.)				
183WL	AISLE STRIP		250		33-51-17

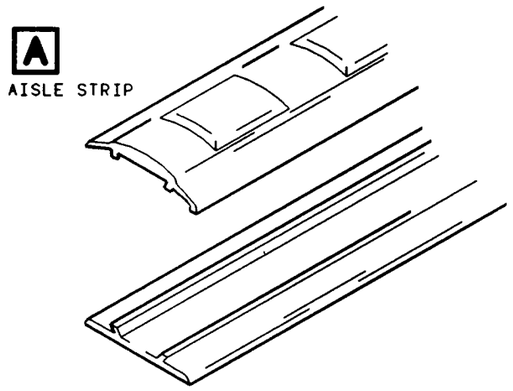
**ON A/C 101-200,

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF.
22WL	SWITCH - EMER EXIT LT	436VU	212		
23WL	INDICATOR - EMER EXIT LT DISARM	436VU	212		
25WL	SWITCH PUSHBUTTON - TEST EMERG	818VU	221		
28WL	SWITCH PUSHBUTTON - EMERG	818VU	221		
29WL	POWER SUPPLY UNITS - EMERG		200		33-51-14
	(REF. CORRESPONDING FIG.)				
30WL	PASSENGER COMPT. EMERGENCY LIGHTING		200		33-51-11
	(REF. CORRESPONDING FIG.)				
31WL	DOOR EXIT SIGN - MODULE		200		33-51-13
	(REF. CORRESPONDING FIG.)				
32WL	CEILING EXIT SIGN - MODULE		200		33-51-12
	(REF. CORRESPONDING FIG.)				
33WL	CEILING EXIT SIGN - MODULE		200		33-51-12
	(REF. CORRESPONDING FIG.)				
34WL	CEILING EXIT SIGN - MODULE		200		33-51-12
	(REF. CORRESPONDING FIG.)				
	LAVATORY AUXILIARY LIGHT		200		33-51-21
	(REF. CORRESPONDING FIG.)				
57WL	PASSENGER COMPT. EMERGENCY LIGHT	849VU	223		33-51-11
58WL	PASSENGER COMPT. EMERGENCY LIGHT	850VU	224		33-51-11
59WL	PASSENGER COMPT. EMERGENCY LIGHT	843VU	263		33-51-11
60WL	PASSENGER COMPT. EMERGENCY LIGHT	842VU	264		33-51-11
71WL	OVERWING EMERGENCY LIGHT		241		33-51-18
72WL	OVERWING EMERGENCY LIGHT		242		33-51-18

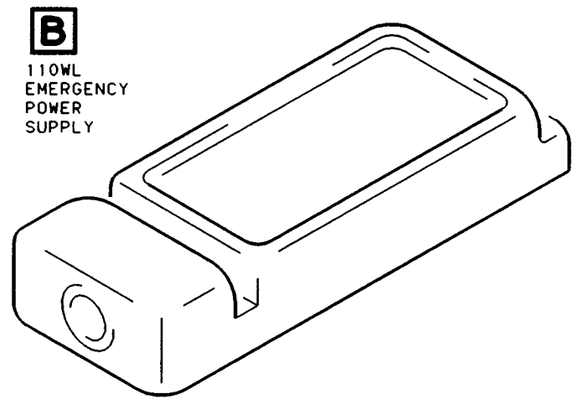
FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF.
110WL	POWER SUPPLY UNITS-EMERG (REF. CORRESPONDING FIG.)		200		33-51-14
111WL	EXIT IDENTIFIER (REF. CORRESPONDING FIG.)		200		33-51-17
112WL	EXIT IDENTIFIER (REF. CORRESPONDING FIG.)		200		33-51-17
113WL	FLOOD LIGHT (REF. CORRESPONDING FIG.)		200		33-51-17
114WL	DIODE	786VU	234		
115WL	DIODE	786VU	234		
116WL	DIODE	787VU	244		
117WL	DIODE	787VU	244		
118WL	DIODE	788VU	253		
119WL	DIODE	788VU	253		
184WL	AISLE STRIP (REF. CORRESPONDING FIG.)		230		33-51-17
185WL	AISLE STRIP (REF. CORRESPONDING FIG.)		230		33-51-17
186WL	AISLE STRIP (REF. CORRESPONDING FIG.)		250		33-51-17
187WL	AISLE STRIP (REF. CORRESPONDING FIG.)		250		33-51-17
188WL	AISLE STRIP (REF. CORRESPONDING FIG.)		240		33-51-17
189WL	AISLE STRIP (REF. CORRESPONDING FIG.)		240		33-51-17

INTENTIONALLY BLANK

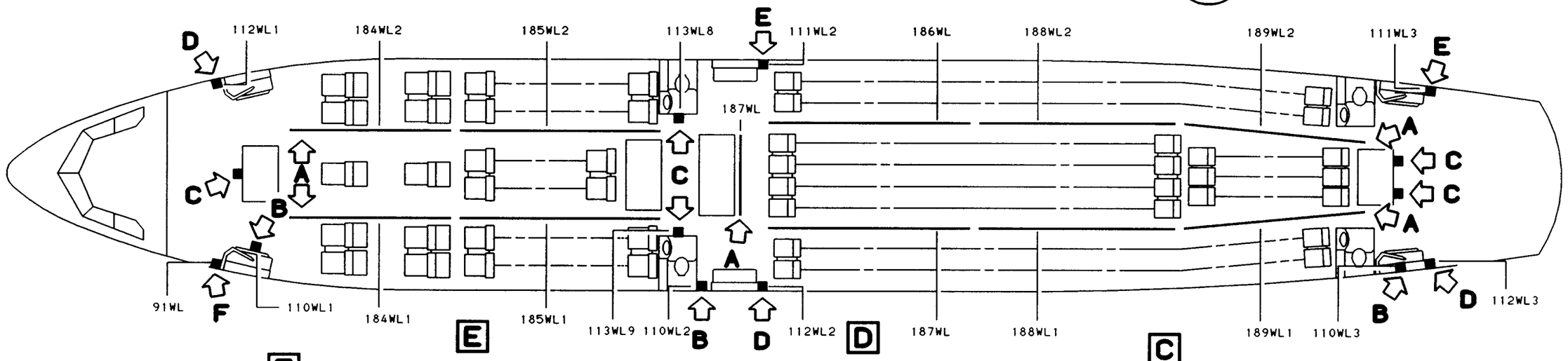
POWER SUPPLY UNITS PSU	UNITS CONNECTED TO EACH PSU		
	EXIT IDENTIFIER	FLOOD LIGHT	AISLE STRIP
110WL1	91WL 112WL1	STOWAGE 1C	184WL1 184WL2 185WL1 185WL2
110WL2	111WL3 112WL2	113WL8 113WL9	186WL 187WL
110WL3	111WL2 112WL3	LAVATORY X	188WL1 188WL2 189WL1 189WL2

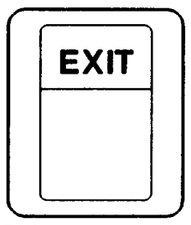


A
AISLE STRIP



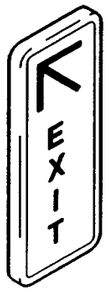
B
110WL
EMERGENCY
POWER
SUPPLY





F

91WL
WALL-MOUNTED
EMERGENCY EXIT
MARKER/LIGHT

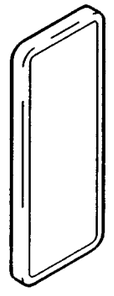


E

111WL
EXIT IDENTIFIER

D

112WL
EXIT IDENTIFIER

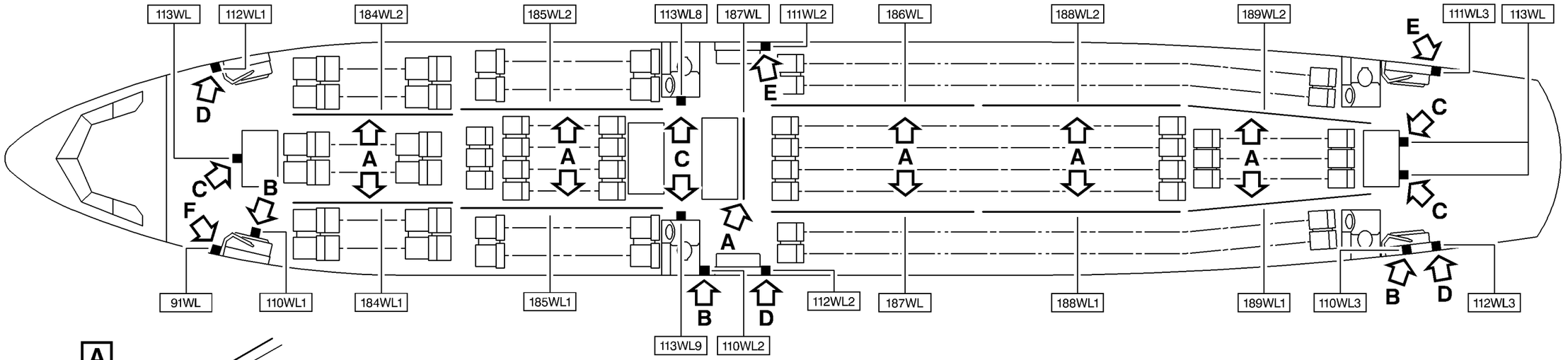


C

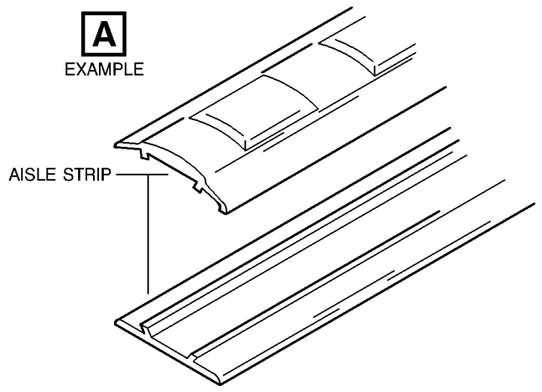
113WL
FLOOD LIGHT
GALLEY

B M 6 33 51 00 0 CCF0 00

Passenger Compartment Emergency Lighting - Location
Figure 005

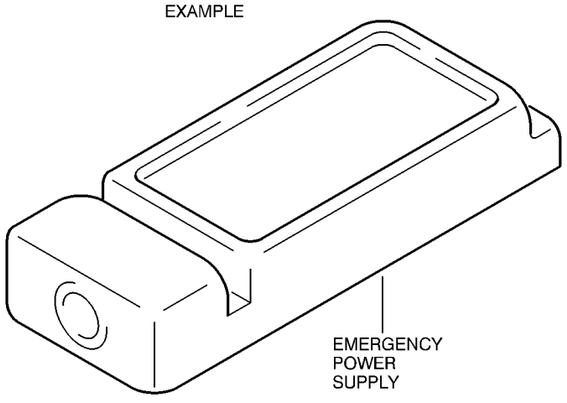


A
EXAMPLE

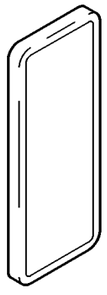


POWER SUPPLY UNITS PSU	UNITS CONNECTED TO EACH PSU		
	EXIT IDENTIFIER	FLOOD LIGHT	AISLE STRIP
110WL1	91WL 112WL1	STOWAGE 1C	184WL1 184WL2 185WL1 185WL2
110WL2	111WL3 112WL2	113WL8 113WL9	186WL 187WL
110WL3	111WL2 112WL3	LAVATORY X	188WL1 188WL2 189WL1 189WL2

B
EXAMPLE



C
EXAMPLE

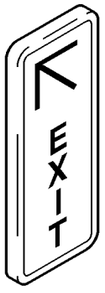


FLOOD LIGHT
GALLEY

D
EXAMPLE

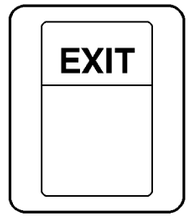
EXIT IDENTIFIER

E
EXAMPLE



EXIT IDENTIFIER

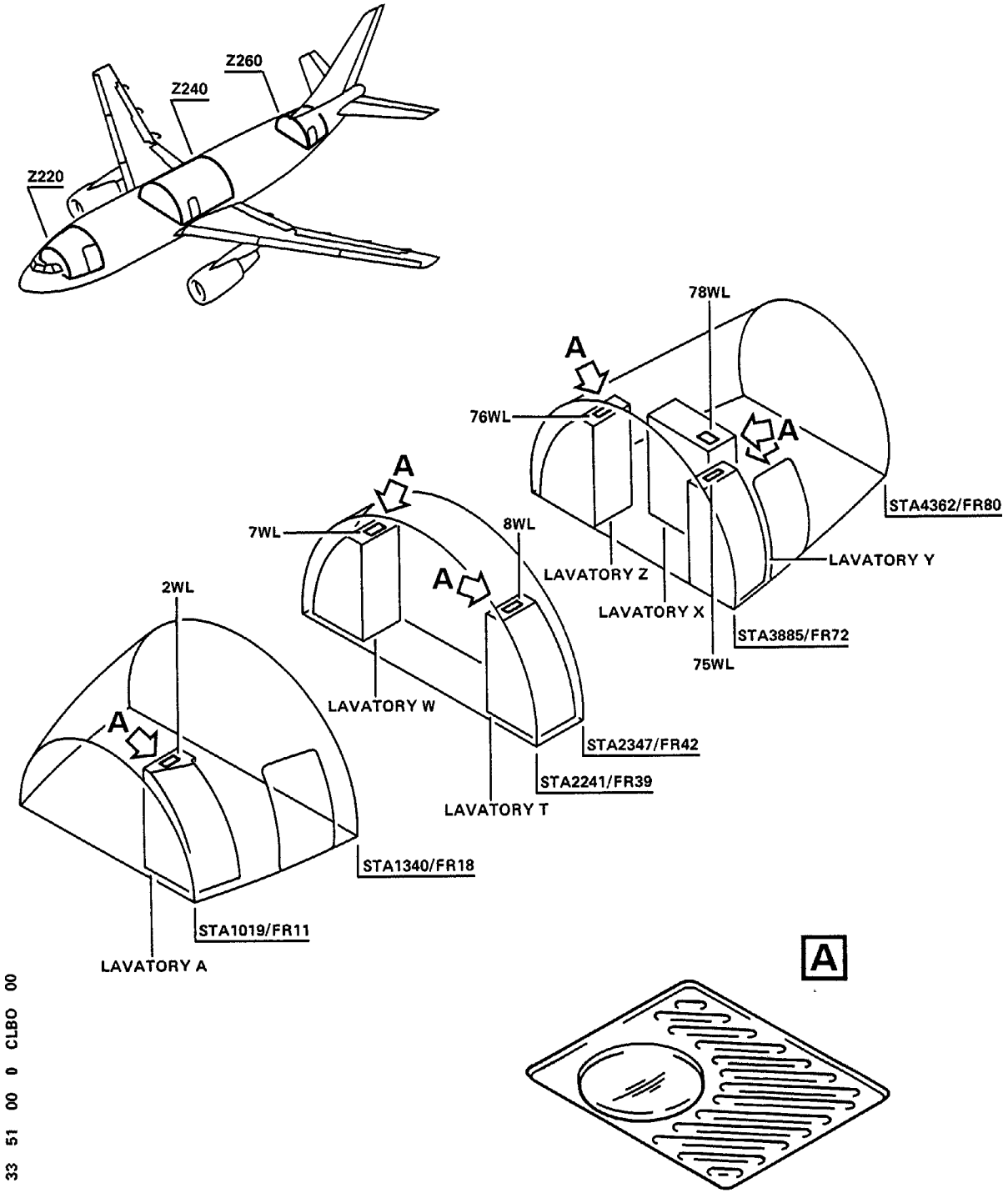
F
EXAMPLE



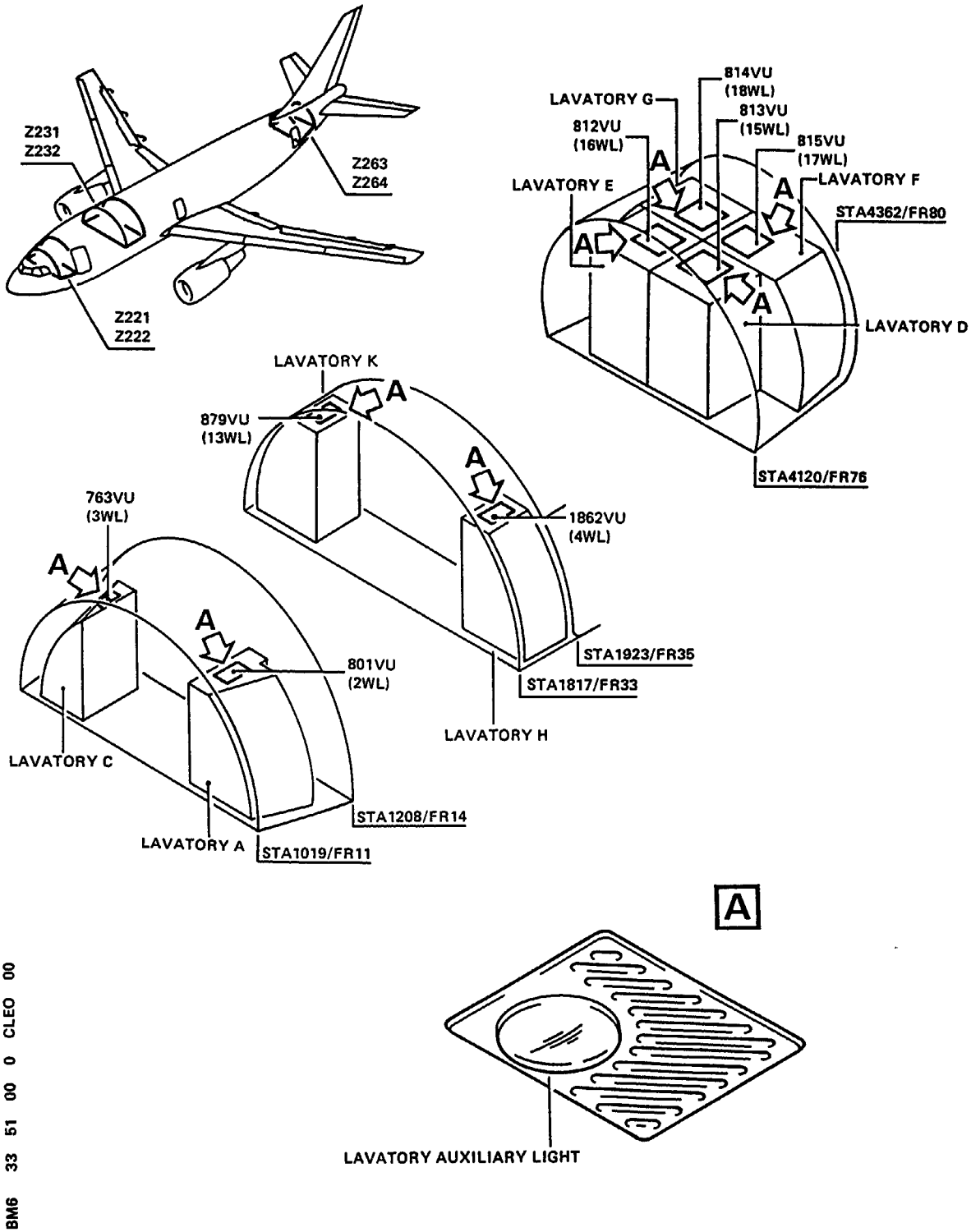
WALL-MOUNTED
EMERGENCY EXIT
MARKER/LIGHT

BM6 33 51 00 0 CCL0 00

Passenger Compartment Emergency Lighting - Location
Figure 006



Lavatory Auxiliary Lighting - Location
Figure 007



BM6 33 51 00 0 CLEO 00

Lavatory Auxiliary Lighting - Location
Figure 008

R EFFECTIVITY: 001-100,

PIA

Printed in France

**ON A/C ALL

3. Description

A. System Description

The passenger compartment emergency lighting system consists of twenty 6 V ceiling light units, six 6 V exit marking signs, six 6 V exit location signs and two 6 V overwing emergency lights. The escape path marking lights consists of six 6 V exit identifiers, six 6 V floodlights and a number of 6 V aisle strips. In each lavatory there is a 28 V auxiliary light unit. The ceiling light units and exit signs are supplied from six emergency power supply units (EPSUs) 29WL. The exit identifiers, floodlights and aisle strips are supplied from three additional emergency power supply units (EPSUs) 110WL. The overwing emergency lights are supplied from appropriate power supply unit internal batteries.

(1) Each of the passenger doors and both of the overwing emergency exits has one exit marking sign, one exit identifier and in the area of the doors there are exit location signs, connected to emergency power supply units.

(2) Both overwing emergency exit door frames contain an overwing emergency light connected to a common power supply unit.

(3) The ceiling light units and the escape path marking lights (exit identifiers, floodlights, aisle strips) are distributed evenly throughout the passenger compartment with a number of lights strips connected to any one emergency power supply unit. The light units strips are so connected that should one emergency power supply unit fail, the light intensity in any one particular area will not be reduced to an unacceptable level.

(4) In an emergency condition it is possible that the normal cabin emergency lighting is obscured. This is when smoke enters the cabin. To provide sufficient illumination of the escape path the low level emergency lighting comes on when the emergency lighting system is activated.

(5) When the emergency lighting system is selected to the ARM or ON position a failure of the 28 V DC battery busbar power will cause the emergency ceiling lights, floor proximity escape path marking lights and EXIT signs to come on, or remain on. The power is supplied by a battery pack installed in each emergency power supply unit (29WL and 110WL).

(6) Control of the emergency lighting system is achieved by grounding various input terminals of the power supply unit. Open circuit or short circuit defects will cause the emergency lighting to switch on automatically.

(7) In case of emergency, the overwing emergency lights will come on automatically only when overwing emergency exits are opened and emergency lighting system is activated. The power under these circumstances is provided by a battery installed in each emergency power supply unit.

(8) A DISARM indicator is provided to indicate that the emergency lighting system is switched off.

(9) An EMERG TEST pushbutton switch at the purser's station is used to carry out a complete serviceability test of the emergency ceiling lights, exit signs and power supply units (29WL).

(10) The system is so designed that the exit signs can be switched on auto-

matically when the NO SMOKING signs come on or, if required, when the landing gear extends.

(11)The lavatory auxiliary lights come on whenever the 28 V DC battery busbar is energized and the TOILETS circuit breaker is closed.

(12)The circuit breakers used in the emergency lighting system are the indicating type. Whenever a circuit breaker is open, a pair of contacts close to complete the indicating circuit. One of the EXIT LT circuit breakers supplies the left-hand power supply units, the other supplies the right-hand power supply units.

**ON A/C ALL

(13)In the event of a failure of the normal electrical power and the emergency switch is in ARM position, the emergency ceiling lights and the complete PEEPLS will come on automatically.
Power for the lighting is provided from the 28 V DC battery busbar 303PP thru a 28 V DC to 6 V DC converter in each power supply unit.

**ON A/C ALL

B. Component Description

(1)The emergency power supply units (29WL) are designed to supply a number of exit signs, ceiling light units, and overwing emergency lights. The number of light units, overwing emergency lights and type of exit signs supplied may vary depending upon installation. The emergency power supply unit (29WL) consists of:

(a)Electronic logic circuitry, an amplifier and switching for the test circuit.

(b)A 28 V DC to 6 V DC converter which is used to supply the light units and exit signs whenever the battery busbar is energized and the emergency lights and/or the exit signs are required on.

(c)A 6 V battery is used to supply the light units and exit signs whenever the system is not selected to DISARM and the power supply from the battery busbar is not available. The battery can be changed without removing the emergency power supply unit. The integral battery is the only electrical source for overwing emergency lights. Before replacement of batteries, all respective circuit breakers must be opened.

(d)A 115 V AC to 7V DC converter, used to charge the battery whenever busbar 105XP-B is energized and circuit breaker EMER EXIT LT CHARGE is closed.

(e)A test circuit which is designed to test the serviceability of an emergency power supply unit and associated light units and exit signs. The test circuit monitors the output current from the power supply unit and when the current is below the rated value, the test circuit will not close to complete the test loop. A red light emitting diode (LED) glows to indicate that the emergency power supply unit, or

one or more of its associated loads is defective. The individual emergency power supply unit may be tested by pressing the test pushbutton on the unit, when serviceable, an LED glows green. In view of the possible different loads for each power supply unit, the operating level of the fault circuit must be 'set up' on installation. This 'setting up' is achieved by bridging different connectors in the emergency power supply unit receptacle. The schematic shows the bridging necessary for the load requirements of one particular power supply unit only.

(f) Electrical heating for the battery is provided from the 28 V DC busbar. Heating is available when the ambient temperature falls below +20 °C.

(2) The emergency power supply units 110WL for the floor prximity escape path marking lights are designed to supply the exit identifiers, floodlights and light strips. The emergency power supply units 110WL consists of:

(a) Electronic logic circuitry containing a low battery cut-off circuit, which turns the EPSU off when battery voltage drops to 4.8 volts, and a slow turn-on circuit to limit lamp in-rush current, in order to prolong lamp life.

(b) Regulator circuit to maintain output voltage.

(c) A 6 V battery pack, used to supply the floor proximity escape path marking lights whenever the system is required on. The battery pack can be changed without removing the EPSU. Before replacement of batteries, all respective circuit breakers must be opened.

(3) Exit signs consist of a plastic case, housing a lens and a number of 6 V lamps connected in parallel. There are three types:

(a) Wall mounted exit location single-sided, one for each of the passenger doors.

(b) Ceiling-mounted exit location double-sided, one for each of the overwing emergency exits.

(c) Exit marking single-sided, one for each of the passenger doors and overwing emergency exits.

(4) Ceiling emergency light units contain two 6 V lamps in parallel, and a lens.

(5) Ceiling mounted lavatory auxiliary lights consist of a housing containing a 28 V lamp and lens.

(6) Overwing emergency lights consist of a housing and lens containing a 6 V lamp.

(7) Exit identifier signs one for each door consists of a plastic case, housing a lens and a number of 6 V lamps connected in parallel.

(8) Floor escape path marking strips consist of flat fiberglass profiles containing a quantity of lamp modules, complete with lamp holders.

(9) Floodlights at fwd galley and aft mid lavatories consists of a plastic housing, a lens and a number of 6 V lamps connected in parallel.

(10) The EMER EXIT LT switch (22WL) in the flight compartment is a 3-position double-pole toggle switch. It is used to switch the emergency lighting system on (ON position) and off (DISARM position). The ARM position enables the emergency lighting system to come on automatically if the A/C battery busbar power fails. To prevent inadvertent system selection, the toggle needs to be pulled before a selection can be made.

(11) The EMERG pushbutton switch (28WL) at the purser's station is used to

switch the emergency lighting system on. It has a translucent red covered cap in order to indicate its emergency function and is covered by a hinged clear plastic cover which prevents inadvertant system selection. It contains an integral light.

(12)The **TEST EMERG** pushbutton (25WL) is adjacent to the **EMERG** switch on the purser's panel. It is used to carry out a test of the ceiling lights, exit signs and power supply units (29WL).
It has an integral light and a translucent white plastic cap.

4. Operation

A. With circuit breakers **EXIT LT** (20WL and 21WL) and **EMER EXIT LT CHARGER** (24WL) closed, busbar **303PP** and **105XP-B** de-energized, switch **EMER EXIT LT** in the **DISARM** position and pushbutton switch **EMERG** not pressed, the power supply unit's 'disarm control line' is grounded and the emergency ceiling units, exit signs, escape path marking lights and overwing emergency lights will be off.

(1)When busbars **303PP** and **105XP-B** are energized, the battery in the emergency power supply units (29WL and 110WL) will be on charge, and battery heating (29WL) will be available. The **DISARM** indicator light will be on. With the **NO SMOKING** switch in position **AUTO**, and landing gear lowered, the emergency power supply units' (29WL) 'exit sign control line' is grounded and the exit signs come on.

(2)When the landing gear is retracted the **NO SMOKING** relay de-energizes, removing the ground signal from the emergency power supply units (29WL) and the exit signs go off.

(3)When switch **EMER EXIT LT** is placed in position **ARM**, the **DISARM** indicator goes off and the emergency power supply units' (29WL and 110WL) 'arm control line' is grounded.
If the power supply on the battery busbar falls below 16 ± 1 V, the battery in each emergency power supply unit switches on and supplies the emergency ceiling light units, exit signs and escape path marking lights. The batteries have the capacity to supply power for sufficient illumination for a minimum of 12 minutes.

**ON A/C ALL

(4)In the event of main **AC** normal busbar failure (main lighting goes off), relay **1XXB** de-energizes. The contacts of relay **1XXB** complete a ground circuit for the power supply units (29WL) 'on control line', through the **ARM/DISARM** switch in the **ARM** position. The emergency ceiling lights and exit signs come on automatically, being supplied from the **A/C** battery busbar via the **28 V DC** to **6 V DC** converter in each power supply unit. If the **A/C** battery busbar voltage falls below **16 ± 1V** the supply of the emergency lighting system will be automatically transferred from the converter to the battery installed in each power supply unit.

**ON A/C ALL

(5)With the battery busbar energized when the EMER EXIT LT switch is placed to ON, or pushbutton EMERG on the pursers panel is pressed a ground is completed for the emergency power supply units' (29WL and 110WL) 'on control line'.
The 28 V DC to 6 V DC converter in the emergency power supply units (29WL) will supply the emergency ceiling lights, and exit signs. The floor proximity escape path, marking lights are supplied from the EPSUs 110 WL integral battery pack. If the EMERG pushbutton is used, an integral light in the pushbutton will illuminate. If, during this selection, the battery busbar falls below 16 ± 1 V, the supply for the emergency lighting will automatically be transferred from the converter to the battery pack in each power supply unit (29WL).

(6)If in an emergency, with EMER EXIT LT switch in position ON and emergency control handle in position ARMED, the overwing emergency exits are opened, the overwing emergency lights will come on. Power is supplied from power supply unit internal batteries only.

(7)Pressing the EMERG TEST pushbutton switch at the pursers station completes a ground for the EPSU 'test signal line' and each EPSU (29 WL) in turn momentarily switches on its associated lights and EXIT signs. When the output current from an EPSU is within the rated value for its particular load (all associated lights and EXIT signs are serviceable) the EPSU completes its test run, a green LED on the TEST button of the EPSU glows and a 28 V DC supply ('test signal') is routed to the next EPSU in the test loop.
When all EPSUs and their associated loads are serviceable the test loop is completed and the 'test signal' is fed to the EMERG TEST switch integral light. The light is illuminated and remains on for approx. 30 seconds, to indicate the emergency lighting system is serviceable. When the output current is outside its rated value (one or more faulty lights or EXIT signs), with the exception of the overwing emergency lights which are disabled, all serviceable associated lights and EXIT signs remain on, a red LED on the TEST button of the EPSU glows and the 'test signal' does not pass on to the next EPSU in the 'test loop'. The light in the EMERG TEST switch remains off.
To determine whether subsequent EPSU's and their associated load are serviceable the TEST button on the next EPSU in the 'test loop' must be pressed, the test loop will re-start from that EPSU. When all subsequent EPSU's and their loads are serviceable the test loop will be completed and the EMERG TEST switch indicator light will be illuminated.

B. With circuit breaker TOILET (1WL) closed and busbar 303PP energized, a 28 V auxiliary light in each lavatory comes on.

**ON A/C ALL

(Ref. Fig. 009)

**ON A/C 001-100,

R

(Ref. Fig. 010) (Sheet 1/2)

**ON A/C 101-200,

R

(Ref. Fig. 011)

**ON A/C 001-100,

(Ref. Fig. 010) (Sheet 2/2)

115VAC NORM BUS (BATTERY CHARGING 29WL)	28VDC ESS. BUS (BATTERY CHARGING 110WL)	ON ARM DISARM	DISARM	NO SMOKING ON AUTO OFF	PURSER PANEL EMERG	CEILING LIGHTS	ESCAPE PATH MARKING LIGHTS EXIT IDENTIFIER	LANDING GEAR POSITION	EXIT SIGNS
YES	YES	DISARM	ON	OFF		OFF	OFF	UP/DOWN	OFF
NO	NO	DISARM	OFF	OFF		OFF	OFF	UP/DOWN	OFF
YES	YES	DISARM	ON	AUTO		OFF	OFF	DOWN	ON (1)
YES	YES	DISARM	ON	AUTO		OFF	OFF	UP	OFF
YES	NO	DISARM	OFF	ON/AUTO		OFF	OFF	UP/DOWN	OFF
YES	YES	DISARM	ON	ON		OFF	OFF	UP/DOWN	ON (1)
YES	YES	ARM	OFF	OFF		OFF	OFF	UP/DOWN	OFF
YES	YES	ARM	OFF	AUTO		OFF	OFF	DOWN	ON (1)
YES	YES	ARM	OFF	AUTO		OFF	OFF	UP	OFF
YES	NO	ARM	OFF	ON/AUTO/OFF		ON (2)	ON (2)	UP/DOWN	ON (2)
YES	YES	ARM	OFF	ON		OFF	OFF	UP/DOWN	ON (1)
YES	YES	ON	OFF	ON/AUTO/OFF		ON (1)	ON (1)	UP/DOWN	ON (1)
YES	NO	ON	OFF	ON/AUTO/OFF		ON (2)	ON (2)	UP/DOWN	ON (2)
YES	YES	ON/ARM	OFF	ON/AUTO/OFF	DEPRESSED	ON (1)	ON (1)	UP/DOWN	ON (1)
YES	YES	DISARM	ON	ON/AUTO/OFF	DEPRESSED	ON (1)	ON (1)	UP/DOWN	ON (1)
YES	NO	ON/ARM/DISARM	OFF	ON/AUTO/OFF	DEPRESSED	ON (2)	ON (2)	UP/DOWN	ON (2)
NO	YES	ARM	OFF	OFF		ON (1)	ON (1)	DOWN	ON (1)
NO	YES	ARM	OFF	OFF		ON (1)	ON (1)	UP	ON (1)

NOTE: (1) ON SUPPLIED BY THE 28VDC ESS BUS VIA EPSU 28V TO 6V CONVERTER
(2) ON SUPPLIED BY EPSU BATTERY PACK

B M 6 33 51 00 0 CGF0 00

System Switching Table
Figure 009

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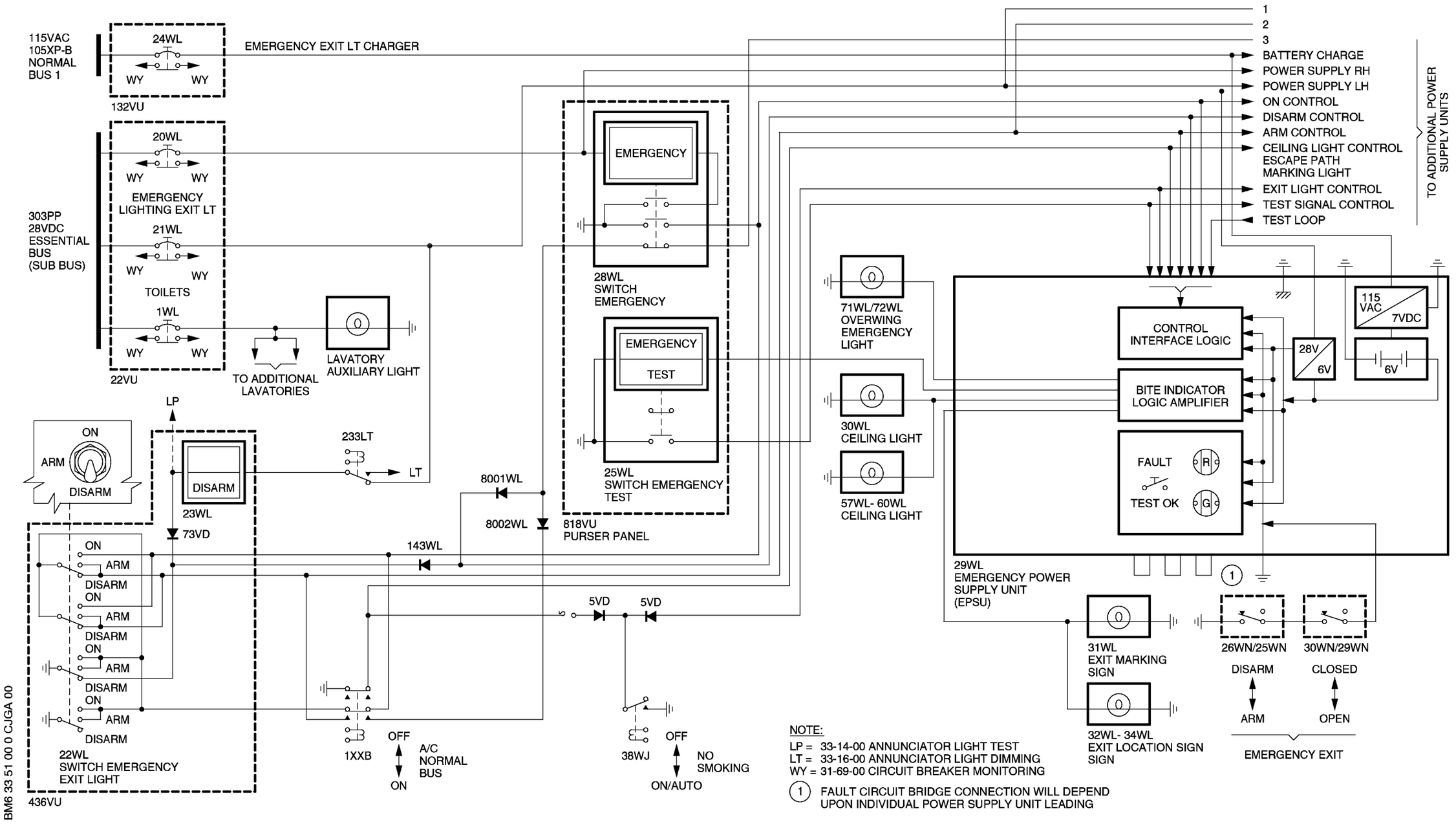

NOTE:
LP = 33-14-00 ANNUNCIATOR LIGHT TEST
LT = 33-16-00 ANNUNCIATOR LIGHT DIMMING
WY = 31-69-00 CIRCUIT BREAKER MONITORING

(1) FAULT CIRCUIT BRIDGE CONNECTION WILL DEPEND UPON INDIVIDUAL POWER SUPPLY UNIT LEADING

BM6 33 51 00 0 CJGA 00

Passenger Compartment Emergency Lighting - Schematic
Sheet 1/2
Figure 010

R EFFECTIVITY: 001-100,

PIA

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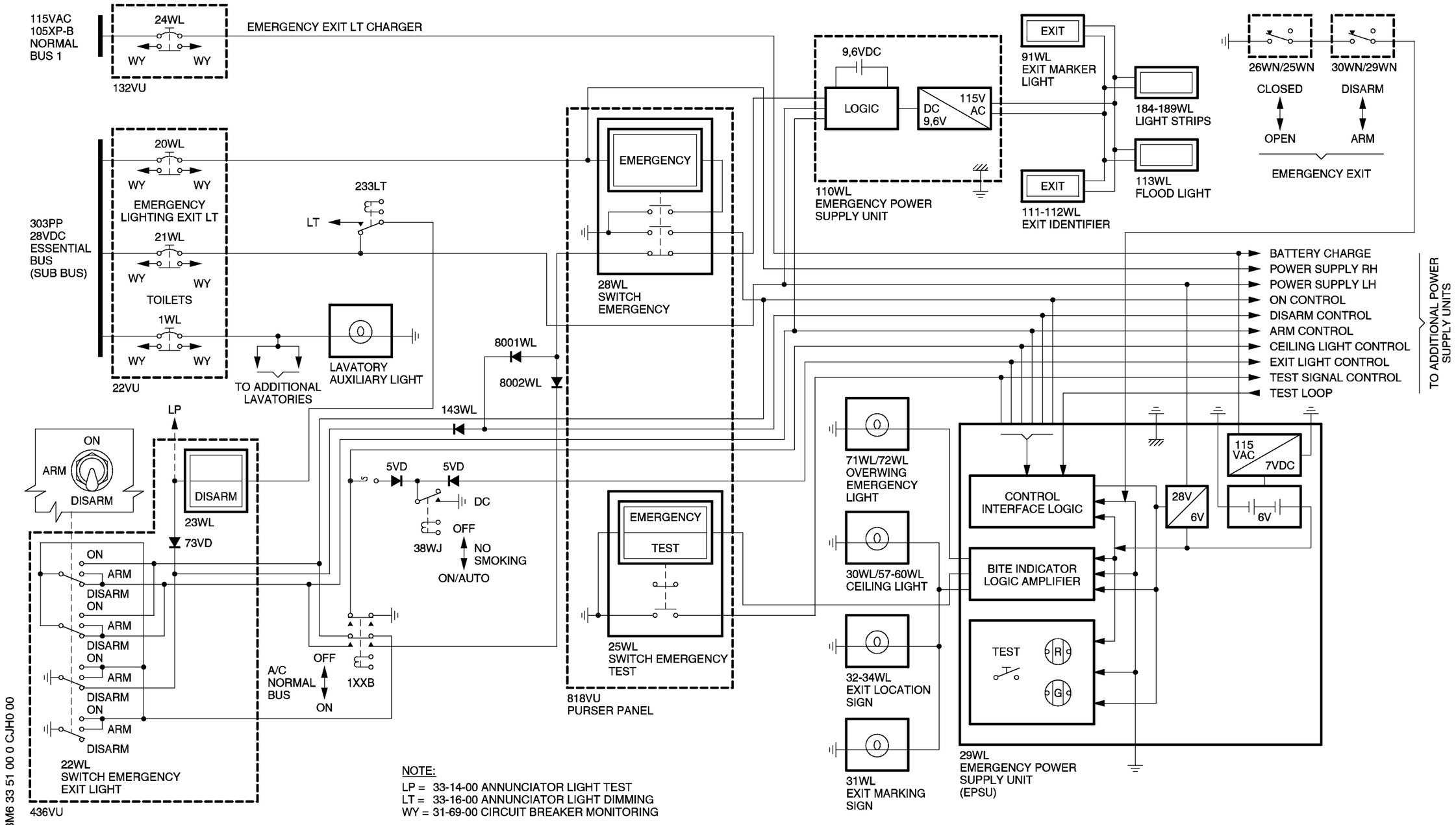
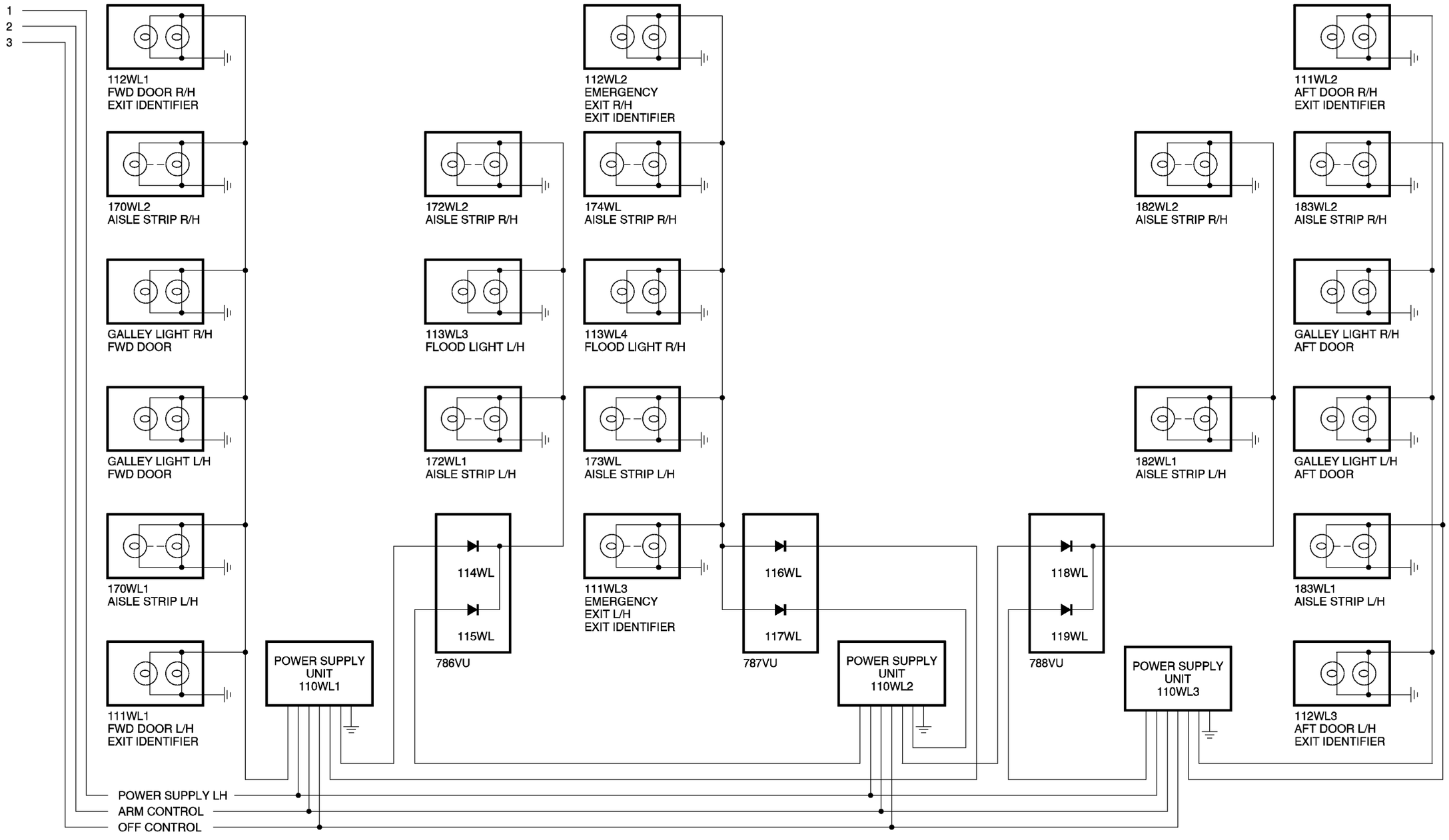


NOTE:
LP = 33-14-00 ANNUNCIATOR LIGHT TEST
LT = 33-16-00 ANNUNCIATOR LIGHT DIMMING
WY = 31-69-00 CIRCUIT BREAKER MONITORING

BM6 33 51 00 0 CJH0 00

Passenger Compartment Emergency Lighting - Schematic
Figure 011



BM6 33 51 00 0 CJGM 00

Passenger Compartment Emergency Lighting - Schematic
Sheet 2/2
Figure 010

R EFFECTIVITY: 001-100,

PIA

1. Operational Test

CAUTION : DURATION OF THOSE PARTS OF THE TEST IN WHICH CIRCUIT BREAKERS 20WL AND 21WL ARE OPEN MUST NOT EXCEED THIRTY SECONDS.

**ON A/C ALL

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A. Reasons for the Job

(1)Operational test of:

(a)Emergency lighting, excluding emergency escape path marking system (EEPMS),(using EMERG TEST pushbutton).

(b)Emergency lighting and EEPMS manual activation (using EMER EXIT LT switch (22WL) in 'ON' position on overhead panel and EMERG pushbutton at purser's station)

(c)Emergency lighting and EEPMS automatic activation in event of loss of AC power (using EMER EXIT LT switch (22WL) in 'ARM' and 'DISARM' position on overhead panel).

(d)Emergency lighting and EEPMS automatic activation in event of loss of DC power (using EMER EXIT LT switch (22WL) in 'ARM' position on overhead panel).

(e)Lavatory auxiliary lighting.

(f)Overwing emergency lights.

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B. Equipment and Materials

ITEM	DESIGNATION
(1)	Electrical Ground Power Unit - 3-Phase, 115/200 V, 400 Hz

Referenced Procedures

- 24-41-00, P. Block 301	AC External Power Control
- 52-73-00, P. Block 501	Emergency Escape Slide Release Warning

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C. Procedure

(1)Job Set-Up

(a)Connect electrical ground power unit and energize aircraft electrical

network (Ref. 24-41-00, P. Block 301).

(b)Make certain that electronics racks ventilation is correct.

(c)Make certain that the following circuit breakers are closed:

PANEL	SERVICE	IDENT.	LOCATION
22VU	EMER LT-EXIT LT	20WL	E27
22VU	EMER LT-EXIT LT	21WL	E28
22VU	EMER LT-TOILETS	1WL	E26
132VU	LIGHTING-EMER LT-EXIT LT CHARGER	24WL	L75
132VU	LIGHTING-PASSENGERS SIGNS-NO SMOKING	31WJ	P80
133VU	ELEC-AC SVCE CTL	20XX	U82

R **ON A/C 006-200,

(2)Test

Make certain that the **NO SMOKING** switch **32WJ** on panel **423VU** and the **EMERG** switch **28WL** on panel **818VU** is in **OFF** position and the **EMER EXIT LT** switch **22WL** on panel **436VU** is in **DISARM** position.

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(a)Operational Test of Emergency Lighting by **EMERG TEST** Pushbutton.

ACTION	RESULT
1. On panel 818VU: - press and hold for 1 sec. **EMERG TEST** pushbutton (25WL).	On panel 818VU: - on completion of test loop the indicator light in pushbutton **EMERG TEST** (25WL) is illuminated for approx. 30 sec.

(b)Operational test of emergency lighting:

- manual activation (using **EMER EXIT LT** switch in **'ON'** selection on overhead panel and **EMERG** pushbutton at purser's station).
- check that all emergency ceiling lights and **EXIT** signs come on.
- check that the complete **EEPMS** comes on.

ACTION	RESULT
1. On panel 436VU: - place switch **EMER EXIT LT** (22WL) in position **ON**.	On panel 436VU: - indicator light **DISARM** (23WL) goes off. Passenger compartment: - all emergency ceiling lights, exit marking signs, exit location signs and the complete **EEPMS**'s come on.
2. On panel 436VU: - place **EMER EXIT LT** switch (22WL) in position **DISARM**.	On panel 436VU: - indicator light **DISARM** (23WL) comes on.

ACTION	RESULT
	Passenger compartment: - all emergency ceiling lights, exit marking signs, exit location signs and the complete EEPMS's go off.
3. On panel 436VU: - place EMER EXIT LT switch (22WL) in position ARM.	On panel 436VU: - indicator light DISARM (23WL) goes off.
4. On panel 818VU: - press pushbutton switch EMERG (28WL).	Passenger compartment: - all emergency ceiling lights, exit marking signs, exit location signs and the complete EEPMS's come on.
On panel 818VU: - integral indicator light in pushbutton switch EMERG (28WL) comes on.	
5. On panel 818VU: - press pushbutton switch EMERG (28WL) again.	Passenger compartment: - all emergency ceiling lights, exit marking signs, exit location signs and the complete EEPMS's go off.
On panel 818VU: - integral indicator light in push-button switch EMERG (28WL) goes off.	
6. On panel 436VU: - place EMER EXIT LT switch (22WL) in position DISARM.	On panel 436VU: - indicator light DISARM (23WL) comes on.

**ON A/C 001-005,

(c)Operational test of emergency lighting:
- automatic activation in event of loss of AC power (using EMER EXIT LT switch on overhead panel in 'ARM' and 'DISARM' position).

ACTION	RESULT
1. On panel 133VU: - open circuit breaker AC SVCE CTL (20XX).	Passenger compartment: - all emergency ceiling lights come on.
2. On panel 436VU: - place switch EMER EXIT LT ON-ARM-DISARM (22WL) in position ARM.	On panel 436VU: - indicator light DISARM (23WL) goes off. Passenger compartment:

ACTION	RESULT
	- all emergency ceiling lights remain on. - the complete EEPMS system comes on. - all EXIT marking signs and EXIT location signs come on.
3. On panel 436VU: - place switch EMER EXIT LT ON-ARM-DISARM (22WL) in position DISARM.	On panel 436VU: - indicator light DISARM (23WL) comes on. Passenger compartment: - all emergency ceiling lights remain on. - the complete EEPMS remains on. - all EXIT marking signs and EXIT location signs go off.
4. On panel 133VU: - close circuit breaker AC SVCE CTL (20XX).	- all emergency ceiling lights go off.

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**ON A/C 006-200,

(c)Operational test of emergency lighting:
- automatic activation in event of loss of AC power (using EMER EXIT LT switch on overhead panel in 'ARM' and 'DISARM' position).

ACTION	RESULT
1. On panel 133VU: - open circuit breaker AC SVCE CTL (20XX).	Passenger compartment: - all emergency ceiling lights and the complete EEPMS come on.
2. On panel 436VU: - place switch EMER EXIT LT ON-ARM-DISARM (22WL) in position ARM.	On panel 436VU: - indicator light DISARM (23WL) goes off. Passenger compartment: - all emergency ceiling lights and the complete EEPMS system remain on. - all EXIT marking signs and EXIT location signs come on.
3. On panel 436VU: - place switch EMER EXIT LT ON-ARM-DISARM (22WL) in position DISARM.	On panel 436VU: - indicator light DISARM (23WL) comes on. Passenger compartment: - all emergency ceiling lights and the complete EEPMS remain on. - all EXIT marking signs and EXIT location signs go off.
4. On panel 133VU:	

ACTION	RESULT
- close circuit breaker AC SVCE CTL (20XX).	- all emergency ceiling lights and the complete EEPMS go off.

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(d)Operational test of emergency lighting:
- automatic activation in event of DC power failure (using 'ARM' selection on overhead panel).

CAUTION : DURATION OF THOSE PARTS OF THE TEST IN WHICH CIRCUIT BREAKERS 20WL AND 21WL ARE OPEN MUST NOT EXCEED THIRTY SECONDS.

ACTION	RESULT
1. On panel 436VU: - place switch EMER EXIT LT ON-ARM-DISARM (22WL) in position ARM.	On panel 436VU: - indicator light DISARM (23WL) goes off.
2. On panel 22VU: - open circuit breakers EMER LT-EXIT LT (20WL and 21WL).	Passenger compartment: - all emergency ceiling lights, the complete EEPMS, the EXIT marking lights and the EXIT location signs come on.
3. On panel 22VU: - close circuit breakers EMER LT-EXIT LT (20WL and 21WL).	Passenger compartment: - all emergency ceiling lights, the complete EEPMS, the EXIT marking lights and the EXIT location signs go off.
4. On panel 436VU: - place switch EMER EXIT LT ON-ARM-DISARM (22WL) in position DISARM.	On panel 436VU: - indicator light DISARM (23WL) comes on.
5. On panel 423VU: - place switch NO SMOKING (32WJ) in position ON.	Passenger compartment: - all EXIT marking and EXIT location signs come on.
6. On panel 423VU: - place switch NO SMOKING (32WJ) in position OFF.	Passenger compartment: - all EXIT marking and EXIT location signs go off.

(e)Operational test of lavatory auxiliary lighting.

ACTION	RESULT
1. On panel 22VU: - open circuit breaker EMER LT-TOILETS (1WL).	In each lavatory: - the auxiliary light goes off.
2. On panel 22VU: - close circuit breaker EMER LT-TOILETS (1WL).	In each lavatory: - the auxiliary light comes on.

(f)Operational test of overwing emergency lights. For testing of overwing lights refer to 52-73-00, P. Block 501.

(3)Close-Up

(a)Make certain that the working area is clean and clear of tools and miscellaneous items of equipment.

(b)De-energize aircraft electrical network and disconnect electrical power.

1. Reason for the Job

A. Replacement of defective light

2. Equipment and Materials

ITEM	DESIGNATION
A.	Stepladder, approx. 2.0 m (6 ft. 6 in.)
B.	Electrical Ground Power Unit - 3-Phase, 115/200 V, 400 Hz

Referenced Procedures

- 24-41-00, P. Block 301	AC External Power Control
- 25-23-13, P. Block 401 (Ref. Fig. 401)	Utility Area Ceiling Panels

3. Procedure

A. Job Set-Up
(1)Position ladder.
(2)Open, safety and tag the following circuit breakers:

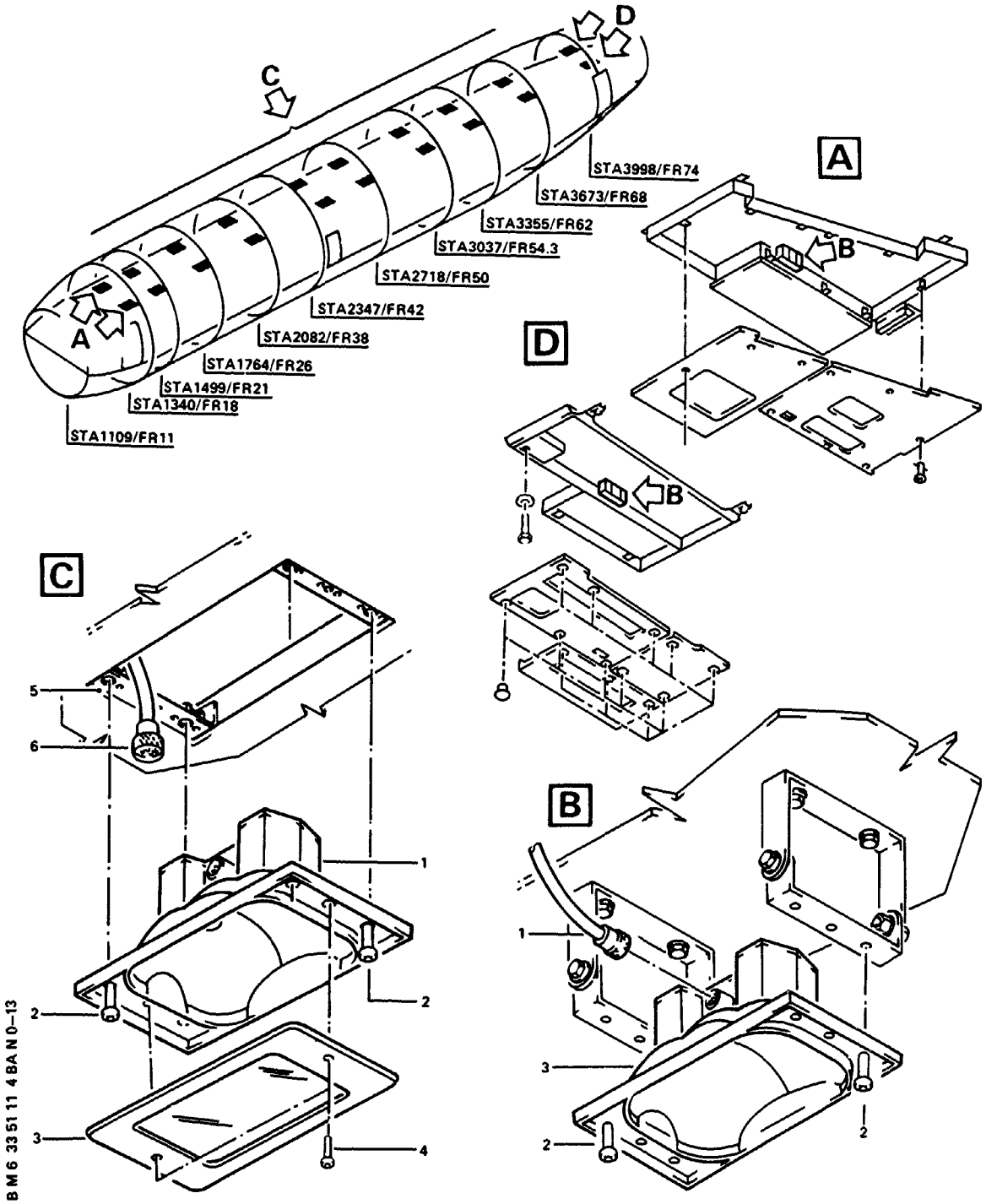
PANEL	SERVICE	IDENT.	LOCATION
22VU	EMER LT EXIT LT	20WL	E27
22VU	EMER LT EXIT LT	21WL	E28

(3)On panel 436VU, make certain that switch EMER EXIT LT ON-ARM-DISARM (22WL) is in DISARM position.
(4)On panel 818VU, make certain that switch EMERG (28WL) is in OFF position.
(5)Remove utility area ceiling panels, as required (25-23-13, P. Block 401).

B. Removal in Passenger Compartment, Entrance Area
(1)Disconnect electrical connector (1).
(2)Remove four light assembly quick-release attachment screws (2).
(3)Remove emergency light (3).

C. Installation in Passenger Compartment, Entrance Area
(1)Position emergency light (3).
(2)Secure emergency light with four quick-release screws (2).
(3)Connect electrical connector (1).
(4)Install utility area ceiling panel (Ref. 25-23-13, P. Block 401).
(5)Remove safety clips and tags and close circuit breakers 20WL and 21WL.

D. Removal in Passenger Compartment
(1)Remove lens attachment screws (4).
(2)Remove lens (3).
(3)Remove four light assembly quick-release attachment screws (2).



Passenger Compartment Emergency Lighting
Figure 401

(4)Remove emergency light (1) from holder (5).
(5)Disconnect electrical connector (6).

E. Installation in Passenger Compartment
(1)Connect electrical connector (6).
(2)Position emergency light (1) in holder (5).
(3)Secure emergency light with four quick-release screws (2).
(4)Position lens (3) and secure with attachment screws (4).
(5)Remove safety clips and tags and close circuit breakers 20WL and 21WL.

F. Test
(1)Connect aircraft electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301):
(2)Carry out the following test procedure:

ACTION	RESULT
1. On panel 818VU: - press pushbutton switch EMERG (28WL).	In passenger compartment: - all emergency lights come on.
2. On panel 818VU: - press pushbutton switch EMERG (28WL) again.	In passenger compartment: - all emergency lights go off.

G. Close-Up
(1)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(2)De-energize aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).

CEILING AND WALL EXIT SIGNS - REMOVAL/INSTALLATION

WARNING : BEFORE POWER IS SUPPLIED TO THE AIRCRAFT MAKE CERTAIN THAT ELECTRICAL CIRCUITS, UPON WHICH WORK IS IN PROGRESS, ARE ISOLATED.

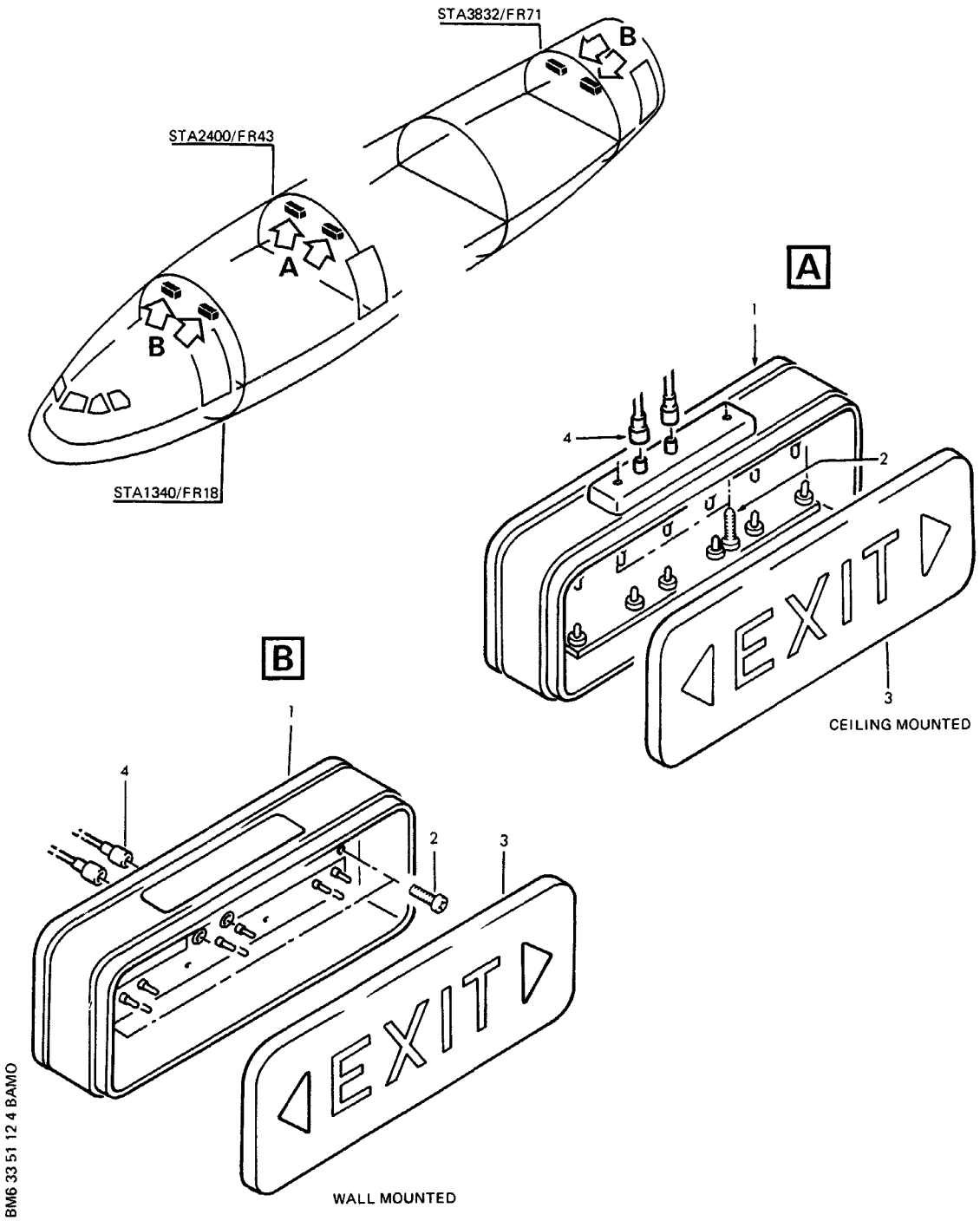
1. Reason for the Job

A. Replacement of a defective unit.

2. Equipment and Materials

ITEM	DESIGNATION
A.	Stepladder, approx. 2.0 m (6 ft. 6 in.)
B.	Electrical Ground Power Unit - 3-Phase, 115/200 V, 400 Hz
Referenced Procedure - 24-41-00, P. Block 301	AC External Power Control

(Ref. Fig. 401)



Exit Location and Exit Marking Signs
Figure 401

3. Procedure

A. Job Set-Up
(1)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	PANEL
22VU	EMER LT EXIT LT	20WL	E27
22VU	EMER LT EXIT LT	21WL	E28

(2)On panel 818VU, make certain that pushbutton switch EMERG (28WL) is in OFF position.
(3)On panel 436VU, make certain that switch EMER EXIT LT ON-ARM-DISARM (22WL) is in DISARM position.
(4)Position stepladder.

B. Removal (Ref. Fig. 401)
(1)Remove EXIT sign cover (3).
(2)Remove screws (2).
(3)Remove overhead EXIT sign (1).
(4)Disconnect electrical connectors (4).

C. Installation
(1)Connect electrical connectors (4).
(2)Position overhead EXIT sign (1).
(3)Secure overhead EXIT sign with screws (2).
(4)Install EXIT sign cover (3).
(5)Remove safety clips and tags, and close circuit breakers 20WL and 21WL.

D. Test
(1)Connect electrical ground power unit and energize aircraft electrical network (Ref. 24-41-00, P. Block 301).

ACTION	RESULT
1. On panel 818VU: - press pushbutton switch EMERG (28WL).	In passenger compartment: - all EXIT location and marking signs come on.
2. On panel 818VU: - press pushbutton switch EMERG (28WL) again.	In passenger compartment: - all EXIT location and marking signs go off.

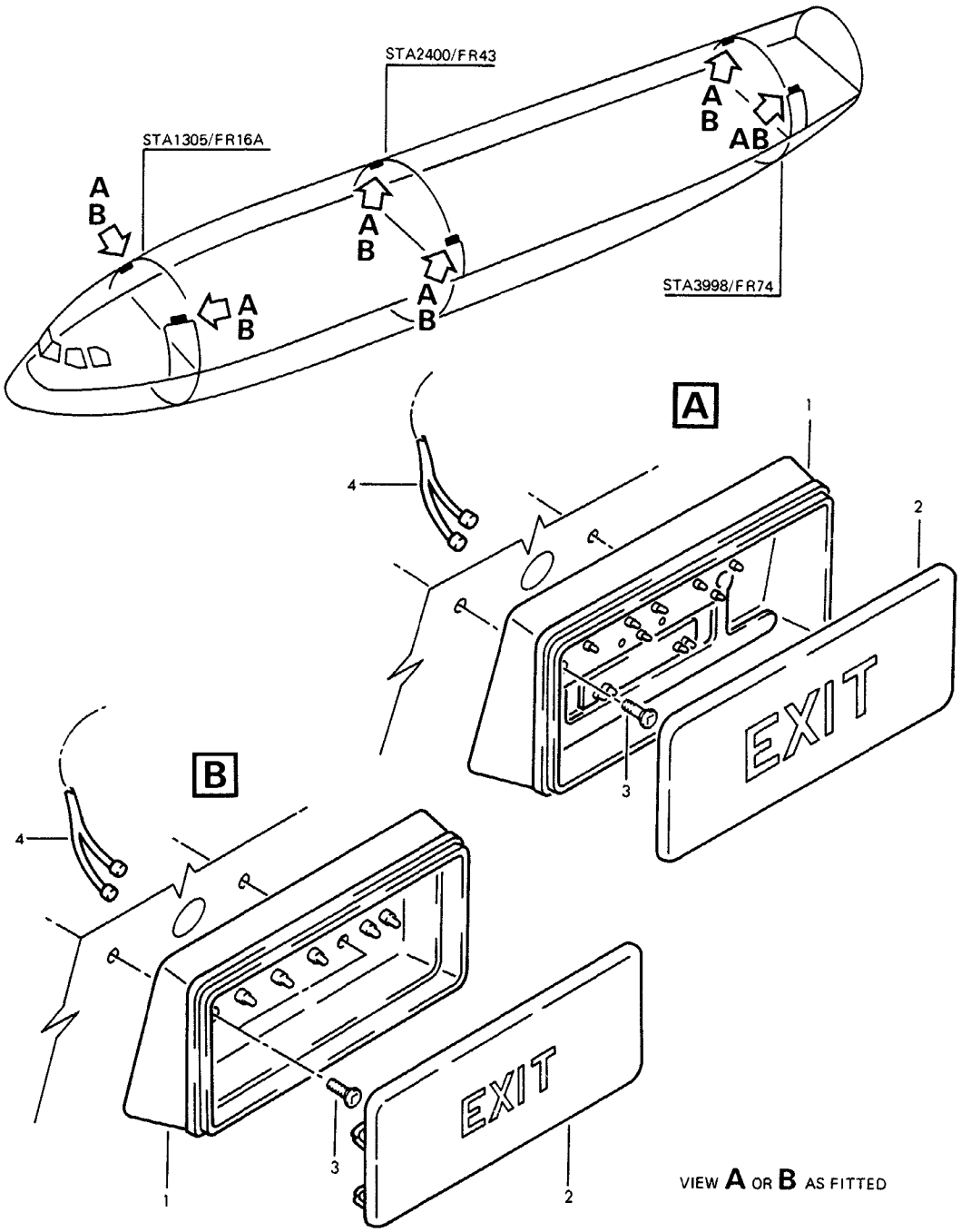
E. Close-Up
(1)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(2)Remove stepladder.
(3)De-energize aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).

DOOR EXIT SIGN - MODULE - REMOVAL/INSTALLATION

WARNING : BEFORE POWER IS SUPPLIED TO THE AIRCRAFT MAKE CERTAIN THAT ELECTRICAL CIRCUITS, UPON WHICH WORK IS IN PROGRESS, ARE ISOLATED.

1. Equipment and Materials

ITEM	DESIGNATION
A.	Stepladder, 1 m (3 ft.)
B.	Electrical Ground Power Unit - 3-Phase, 115/200 V, 400 Hz
Referenced Procedure - 24-41-00, P. Block 301 (Ref. Fig. 401)	AC External Power Control



Exit Marking Signs
Figure 401

2. Procedure

A. Job Set-Up
(1)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
22VU	EMER EXIT LT	20WL	E27
22VU	EMER EXIT LT	21WL	E28

(2)On panel 818VU, make certain that pushbutton switch EMERG (28WL) is in OFF position.
(3)On panel 436VU, make certain that switch EMER EXIT LT ON-ARM-DISARM (22WL) is in DISARM position.
(4)Position stepladder.

B. Removal (Ref. Fig.)
(1)Remove light cover (2).
(2)Remove two or four light attachment screws (3).
(3)Remove door exit sign (1).
(4)Disconnect electrical connector (4).

C. Installation (Ref. Fig.)
(1)Connect electrical connector (4).
(2)Position door exit sign (1).
(3)Secure door exit sign with two or four screws (3).
(4)Press home light cover (2).
(5)Remove safety clips and tags and close circuit breakers 20WL and 21WL.

D. Test
(1)Connect electrical ground power unit and energize aircraft electrical network (Ref. 24-41-00, P. Block 301):
(2)Carry out the following test:

ACTION	RESULT
1. On panel 818VU: - press EMERG switch (28WL).	In passenger compartment: - all EXIT marking signs come on.
2. On panel 818VU: - press EMERG switch (28WL) again.	In passenger compartment: - all EXIT marking signs go off.

E. Close-Up
(1)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(2)Remove stepladder.
(3)De-energize aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).

POWER SUPPLY UNIT - REMOVAL/INSTALLATION

NOTE : The power supply unit comprises an electronic unit and battery. It is designed such, that the battery can be removed without removing the electronic unit from the aircraft. This is of advantage, as only the batteries need periodic removal from the aircraft for bench test.

1. Reason for the Job

A. Removal of Power Supply Unit 29WL

B. Removal of Battery 29WL

C. Removal of Power Supply Unit 110WL

D. Removal of Battery 110WL

2. Equipment and Materials

ITEM	DESIGNATION
A.	Electrical Ground Power Unit - 3-Phase, 115/200 V, 400 Hz
B.	Stepladder, 2.0 m (6 ft. 6 in.)

Referenced Procedures

- 25-23-13, P. Block 401	Utility Area Ceiling Panels
- 25-23-41, P. Block 401	Door Frame Lining
- 24-41-00, P. Block 301	AC External Power Control

3. Procedure

A. Job Set-Up

(1)On panel 818VU, make certain that pushbutton switch EMERG (28WL) is in OFF position.

(2)On panel 436VU, make certain that switch EMERG EXIT LT ON-ARM-DISARM (22WL) is in DISARM position.

(3)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
22VU	EMER LT-EXIT LT	20WL	E27
22VU	EMER LT-EXIT LT	21WL	E28
132VU	LIGHTING-EMER-LT-EXIT LT CHARGER	24WL	L75

R **ON A/C 001-100,

(4)Position stepladder.

(5)Open panel to gain access to power supply units installed at forward passenger crew doors.

(6)Open panel to gain access to power supply units installed behind the exit marking signs at passenger emergency exits.

(7)Open panel to gain access to power supply units installed at aft

passenger crew doors.

R **ON A/C 101-200,

(4)Position stepladder.
(5)Open panel to gain access to power supply units 29WL installed at forward passenger/crew doors (Ref. 25-23-41, P. Block 401).
(6)Open panel to gain access to power supply units 29WL installed behind the exit marking signs at passenger emergency exits (Ref. 25-23-41, P. Block 401).
(7)Open panel to gain access to power supply units 29WL installed at aft passenger/crew doors (Ref. 25-23-13, P. Block 401).
(8)Open relevant ceiling panel LH (Ref. 25-23-13 P. Block 401) to gain acces to power supply unit 110WL installed in area of FWD LH passenger/crew door.
(9)Open relevant ceiling panel (Ref. 25-23-41 P. Block 401) to gain access to power supply unit 110WL installed in area of passenger emergency exit LH.
(10)Open relevant ceiling panel (Ref. 25-23-13 P. Block 401) to gain access to power supply unit 110WL installed in area of AFT LH passenger/crew door.

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B. Removal of Power Supply Unit
(1)Disconnect electrical connector (1).
(2)Remove screws (2) and washers (3), securing power supply unit (4).

C. Installation of Power Supply Unit
(1)Install power supply unit (4), with screws (2) and washers (3).
(2)Connect electrical connector (1).

D. Removal of Battery
NOTE : Before removal of battery disconnect electrical connector from power supply unit.
(1)Open relevant panel to gain access to power supply unit.
(2)Release screws (5) securing battery assy (6) to electronic unit (7) of power supply unit.
(3)Carefully withdraw the battery assy (6) from electronic unit.

E. Preparation for Installation
(1)Ensure that the battery is fully charged.

F. Installation of Battery
(1)Carefully connect battery assy (6) to electronic unit (7) of power supply unit.
(2)Fasten screws (5) to electronic unit (7) of power supply unit.
(3)Connect electrical connector.

R **ON A/C 101-200,

B. Removal of Power Supply Unit 29WL
(1)Disconnect electrical connector (1).
(2)Remove screws (2) and washers (3), and power supply unit (4).

C. Installation of Power Supply Unit 29WL
(1)Install power supply unit (4), with screws (2) and washers (3).
(2)Connect electrical connector (1).

D. Removal of Battery 29WL
NOTE : Before removal of battery disconnect electrical connector from power supply unit.
(1)Release screws (5) securing battery assy (6) to electronic section (7) of power supply unit.
(2)Carefully withdraw the battery assy (6) from electronic section.

E. Preparation for Installation
(1)Ensure that the battery is fully charged.

F. Installation of Battery 29WL
(1)Carefully connect battery assy (6) to electronic section (7) of power supply unit.
(2)Fasten screws (5) to electronic section (7) of power supply unit.
(3)Connect electrical connector (1).

G. Removal of Power Supply Unit 110WL
(1)Disconnect electrical connector (1).
(2)Remove screws (2), washers (3), and power supply unit (4).

H. Installation of Power Supply Unit 110WL
(1)Install power supply unit (4), with screws (2) and washers (3).
(2)Connect electrical connector (1).

J. Removal of Battery 110WL
CAUTION : DO NOT RAISE THE BATTERY ASSEMBLY BEFORE SLIDING AWAY FROM THE ELECTRONIC UNIT. DOING SO WILL DAMAGE THE CONNECTOR PINS ON THE ELECTRONIC UNIT.
NOTE : Before Removal of battery disconnect electrical connector from power supply unit.
(1)Release quick release fastener (5).
(2)Slide the battery assembly (6) away from the electronic unit (4) until the sockets (7) clear the connector pins.
(3)Lift the battery assembly (6) from the electronic unit (4).

K. Preparation for Installation
(1)Ensure that the battery is fully charged.

L. Installation of Battery 110WL
(1)Insert the battery assembly (6) into the electronic unit (4).

(2)Slide the battery assembly (6) toward the electronic unit (4) inserting the pins (7) into the sockets. Push forward until the battery assembly (4) is securely seated.
(3)Push down the quick-release fasteners (5) until they lock into position.
(4)Connect electrical connector (1).

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(Ref. Fig. 401)

R **ON A/C 101-200,

(Ref. Fig. 402)

R **ON A/C 001-100,

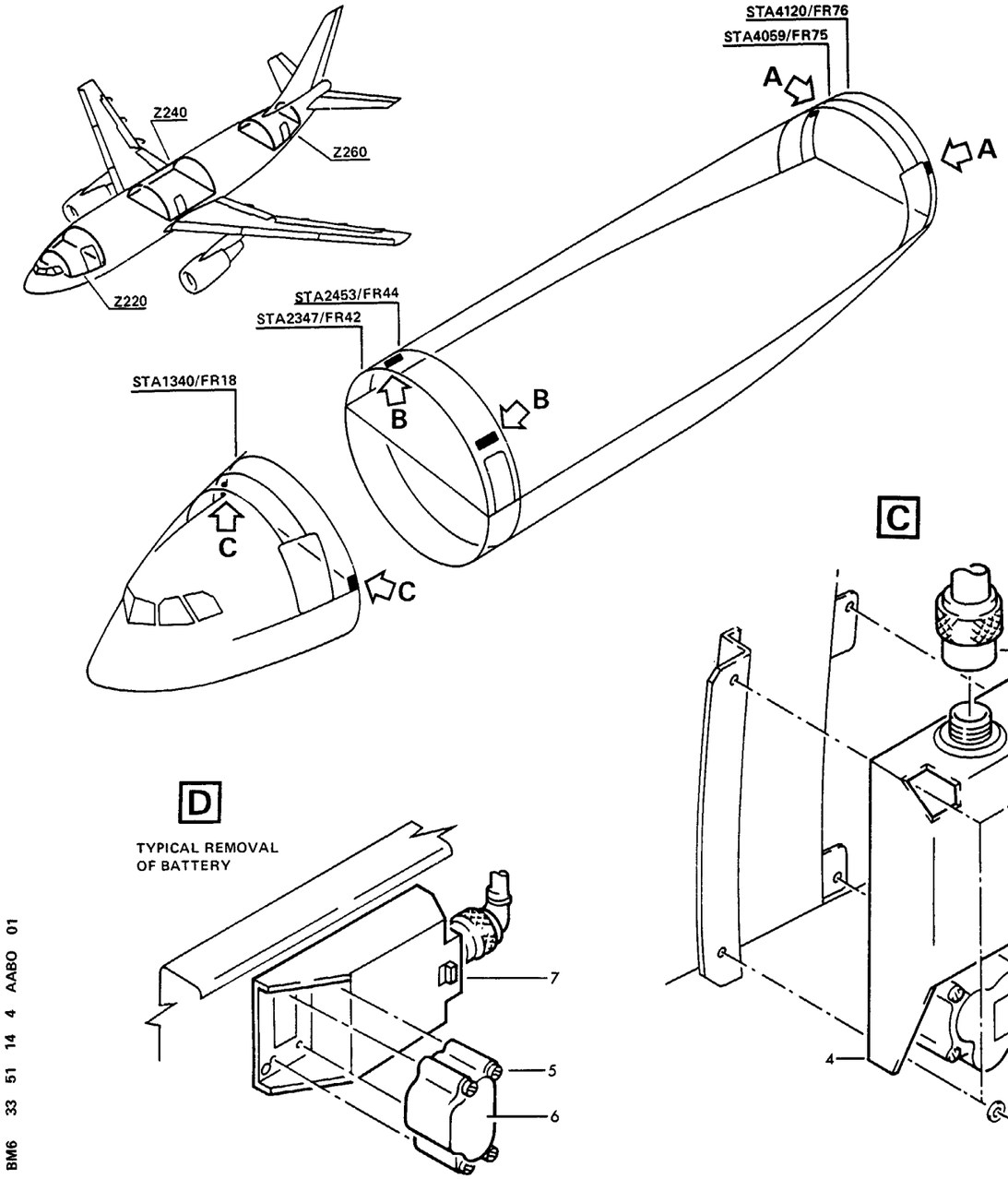
G. Test
(1)Remove safety clips and tags and close circuit breakers 20WL, 21WL and 24WL.
(2)Connect aircraft electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301):
(3)Carry out the following test procedure:

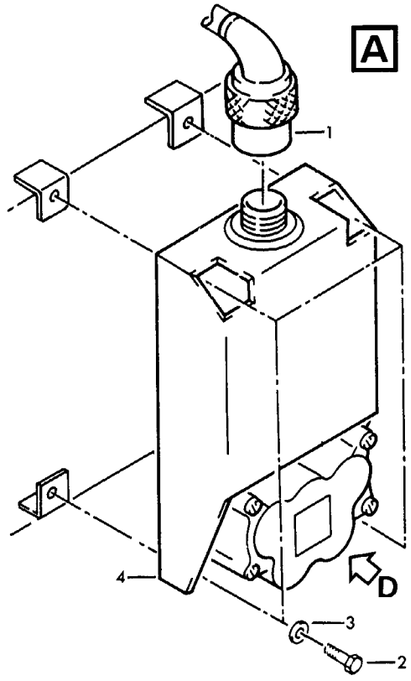
ACTION	RESULT
1. On panel 818VU: - press (min. 1 sec.) and release pushbutton TEST EMERG (25WL).	On panel 818VU: - the indicator light in pushbutton TEST EMERG (25WL) comes on for approx. 30 sec. and goes off.

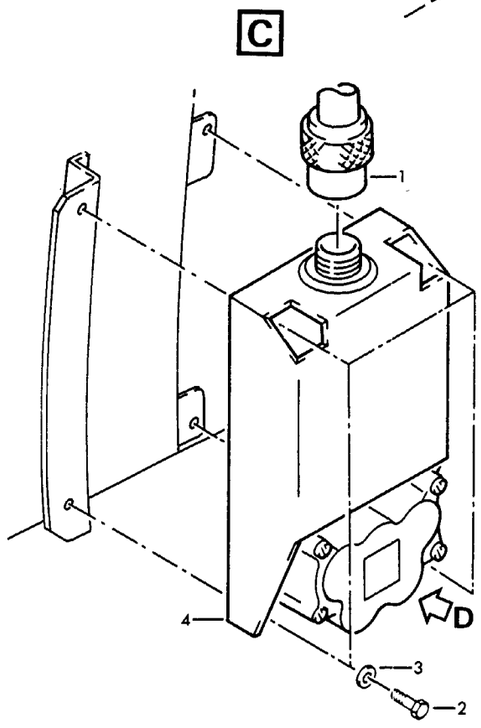
H. Close-Up
(1)Install all panels removed at Para. 3.A.
(2)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(3)De-energize aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).

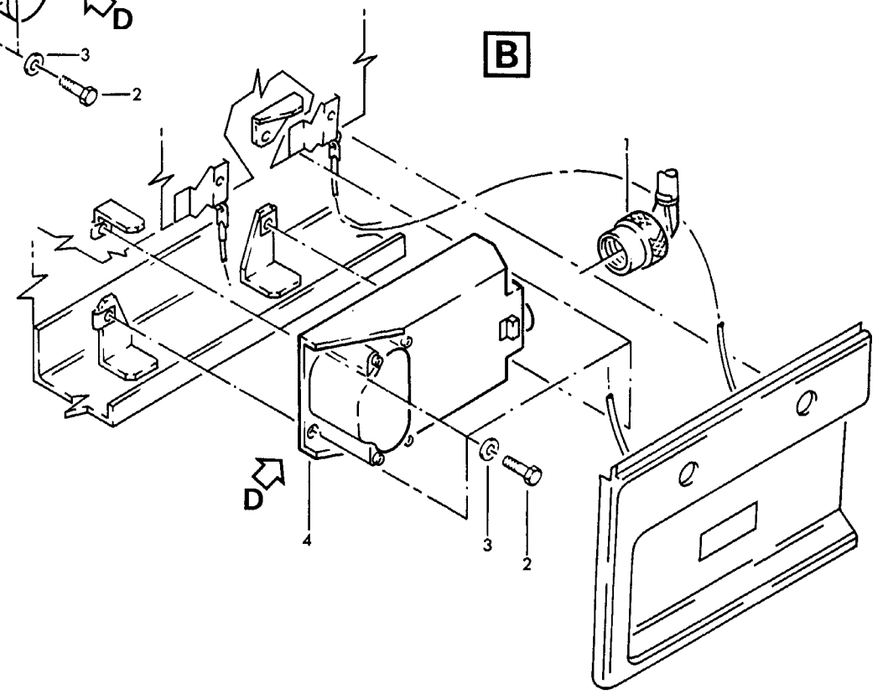
R **ON A/C 101-200,

M. Test
(1)Connect aircraft electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(2)Remove safety clips and tags and close circuit breakers 20WL, 21WL and 24WL.
(3)Carry out the following test procedure:









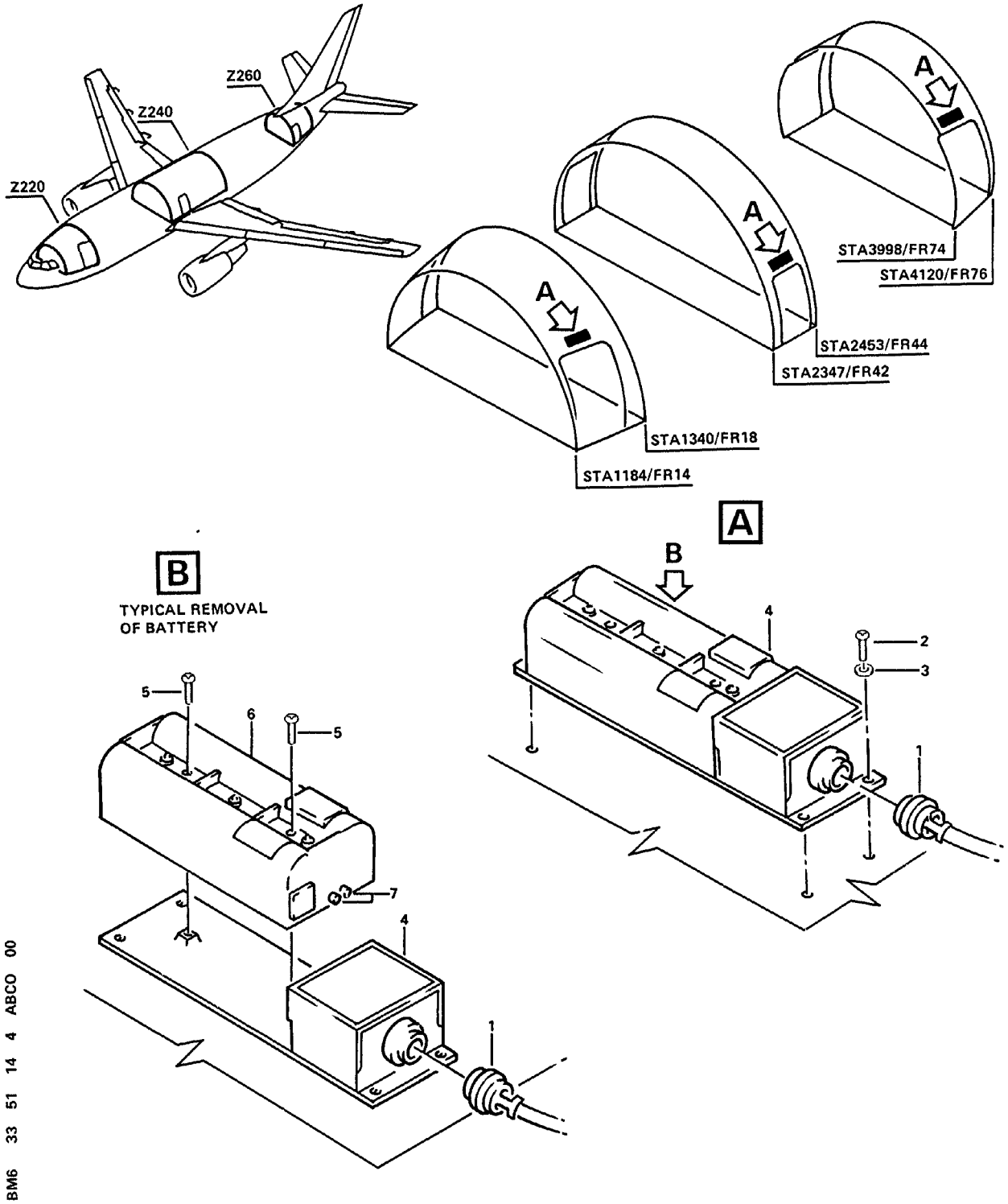
D

TYPICAL REMOVAL
OF BATTERY

BM6 33 51 14 4 AABO 01

Power Supply Unit
Figure 401

Printed in France



BM6 33 51 14 4 ABCO 00

Power Supply Unit - Floor Proximity
Figure 402

ACTION	RESULT
1. On panel 818VU: - press pushbutton switch EMERG (28WL).	Passenger Compartment: - all emergency lights come on.
2. On panel 818VU: - press pushbutton switch EMERG (28WL) again.	Passenger Compartment: - all emergency lights go off.

N. Close-Up
(1)Install all panels removed at Para. 3. A.
(2)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(3)De-energize aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).

R **ON A/C 001-100,

1. Reason for the Job

A. Removal of Floor Light Strip Module

B. Removal of Exit Identifier

C. Removal of Flood Light

R **ON A/C 101-200,

R 1. Reason for the Job

R A. Removal of Floor Light Strip Module

R B. Removal of Wall-Mounted EXIT Marker/Light

R C. Removal of Exit Identifier

R D. Removal of Flood Light

R **ON A/C ALL

2. Equipment and Materials

ITEM	DESIGNATION
A.	Electrical Ground Power Units-3 Phase, 115/200 V, 400Hz
Referenced Procedure - 24-41-00, P. Block 301	AC External Power Control

3. Procedure

A. Job Set-Up
(1)On panel 818VU, make certain that pushbutton switch EMRG (28WL) is in OFF position.
(2)On panel 436VU, make certain that switch EMERG EXIT LT ON-ARM-DISARM (22WL) is in DISARM position.
(3)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
22VU	EMER LT-EXIT LT	20WL	E27
22VU	EMER LT-EXIT LT	21WL	E28
132VU	LIGHTING-EMER LT-EXIT LT CHARGER	24WL	L75

R **ON A/C 001-100,

B. Removal of Floor Light Strip Module (Ref. Fig. 401)
(1)Insert a tool in notch (1) on forward end of lamp module (2) and pry outward until snap latch has disengaged.
(2)Remove lamp module (2) from cover (3) and pull forward to withdraw lamp wiring service loop (4) from cover (3).
(3)Grasp lamp holder (5) near lamp module (2) and pull straight out of lamp module (2).

C. Removal of Exit Identifier (Ref. Fig. 401)
(1)Release screw (6) from lens cover (8).
(2)Insert a tool in slot (7) on top of mounting base (11).
(3)Pull lens cover (8) forward.
(4)Remove lamp board (9) to gain access to screws (10).
(5)Disconnect electrical connector (12).

D. Removal of Flood Light (Ref. Fig. 401)
(1)Insert a tool in slot (7) on top of mounting base (11).
(2)Pull lens cover (13) forward.
(3)Remove lamp board (9) to gain access to screws (10).
(4)Disconnect electrical connector (12).

E. Installation of Floor Light Strip Module (Ref. Fig. 401)
(1)Grasp lamp module (2) push lampholder (5) straight into lamp module (2).
(2)Position lamp module (2) in cover (3) and push until snap latch engages.

F. Installation of Exit Identifier (Ref. Fig. 401)
(1)Connect electrical connector (12).
(2)Position mounting base (11) and secure with screws (10).
(3)Install lamp board (9) and push lens cover (8) downward and secure with screw (6).

G. Installation of Flood Light (Ref. Fig. 401)
(1)Connect electrical connector (12).
(2)Position mounting base (11) and secure with screws (10).
(3)Install lamp board (9) and push lens cover (13) downward until latched.

R **ON A/C 101-200,

R B. Removal of Floor Light Strip Module (Ref. Fig. 402)

R (1)Insert a tool in notch (1) on forward end of lamp module (2) and pry outward until snap latch has disengaged.
R (2)Remove lamp module (2) from cover (3) and pull forward to withdraw lamp wiring service loop (4) from cover (3).
R (3)Grasp lamp holder (5) near lamp module (2) and pull straight out of lamp module (2).

R C. Removal of Exit Marker (Ref. Fig. 402)
R (1)Insert a tool between exit marker cover (14) and panel and carefully remove light cover (14) from mounting plate.
R (2)Disconnect electrical connector (15).
R (3)Remove exit marker (14).

R D. Removal of Exit Identifier (Ref. Fig. 402)
R (1)Release screw (6) from lens cover (8).
R (2)Insert a tool in slot (7) on top of mounting base (11).
R (3)Pull lens cover (8) forward.
R (4)Remove lamp board (9) to gain access to screws (10).
R (5)Disconnect electrical connector (12).

R E. Removal of Flood Light (Ref. Fig. 402)
R (1)Release screw (6) from lens cover (13).
R (2)Insert a tool in slot (7) on top of mounting base (11).
R (3)Pull lens cover (13) forward.
R (4)Remove lamp board (9) to gain access to screws (10).
R (5)Disconnect electrical connector (12).

R F. Installation of Floor Light Strip Module (Ref. Fig. 402)
R (1)Grasp lamp module (2) push lampholder (5) straight into lamp module (2).
R (2)Position lamp module (2) in cover (3) and push until snap latch engages.

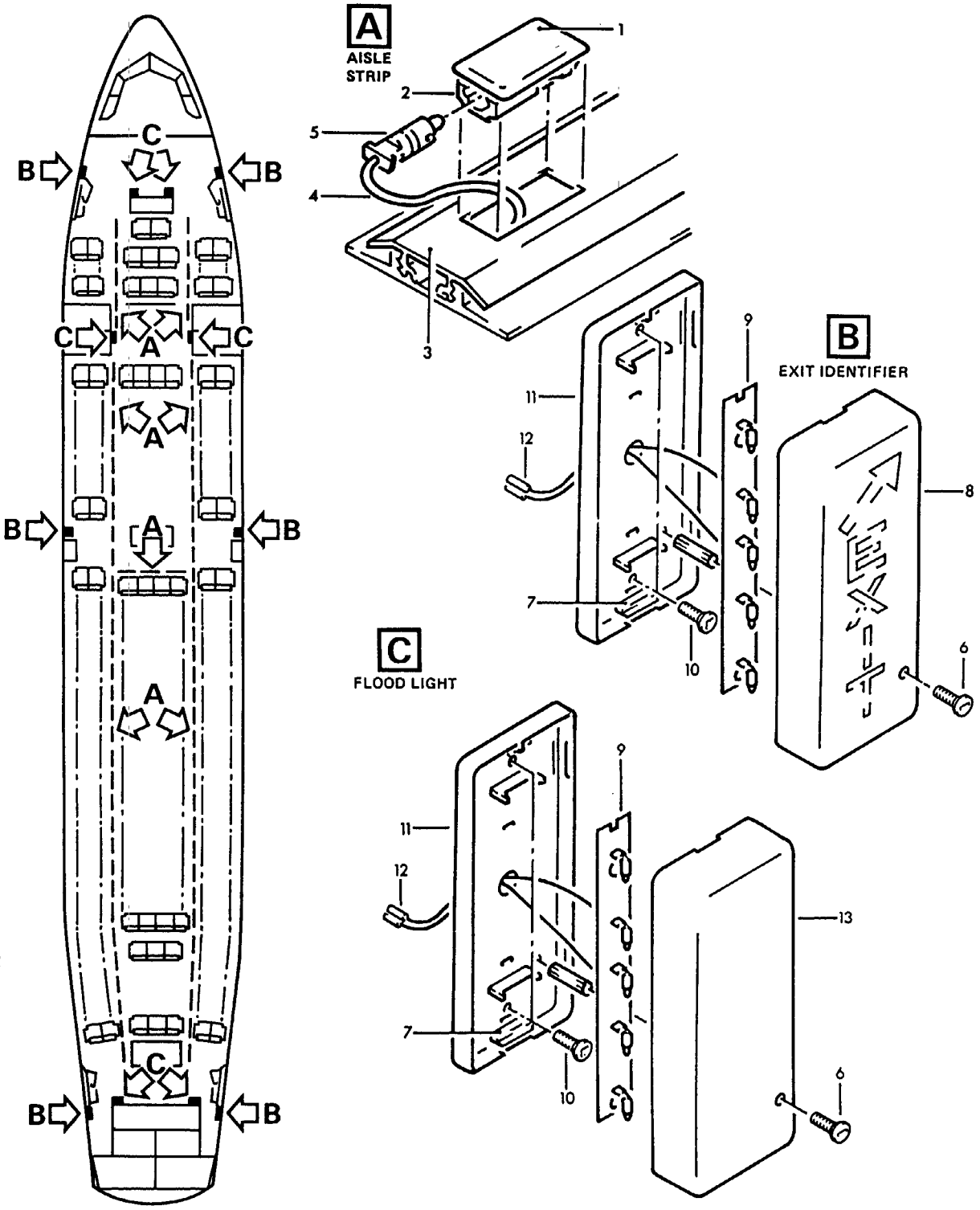
R G. Installation of Exit Marker (Ref. Fig. 402)
R (1)Connect electrical connector (15).
R (2)Position marker cover (14) on mounting plate and press both down.

R H. Installation of Exit Identifier (Ref. Fig. 402)
R (1)Connect electrical connector (12).
R (2)Position mounting base (11) and secure with screws (10).
R (3)Install lamp board (9) and push lens cover (8) downward and secure with screw (6).

R J. Installation of Flood Light (Ref. Fig. 402)
R (1)Connect electrical connector (12).
R (2)Position mounting base (11) and secure with screws (10).
R (3)Install lamp board (9) and push lens cover (13) downward until latched.

R **ON A/C 001-100,

(Ref. Fig. 401)



Floor Escape Path Marking Lighting
Figure 401

R **ON A/C 101-200,

R (Ref. Fig. 402)

R **ON A/C 001-100,

H. Test
(1)Connect electrical ground power unit and energize aircraft electrical network (Ref. 24-41-00, P. Block 301).
(2)Remove safety clips and tags and close circuit breakers 20WL, 21WL and 24WL.
(3)Carry out the following test procedure:

ACTION	RESULT
1. On panel 818VU: - press pushbutton switch EMERG (28WL).	In passenger compartment: - all emergency lights come on.
2. On panel 818VU: - Press pushbutton switch EMERG (28WL) again.	In passenger compartment: - all emergency lights go off.

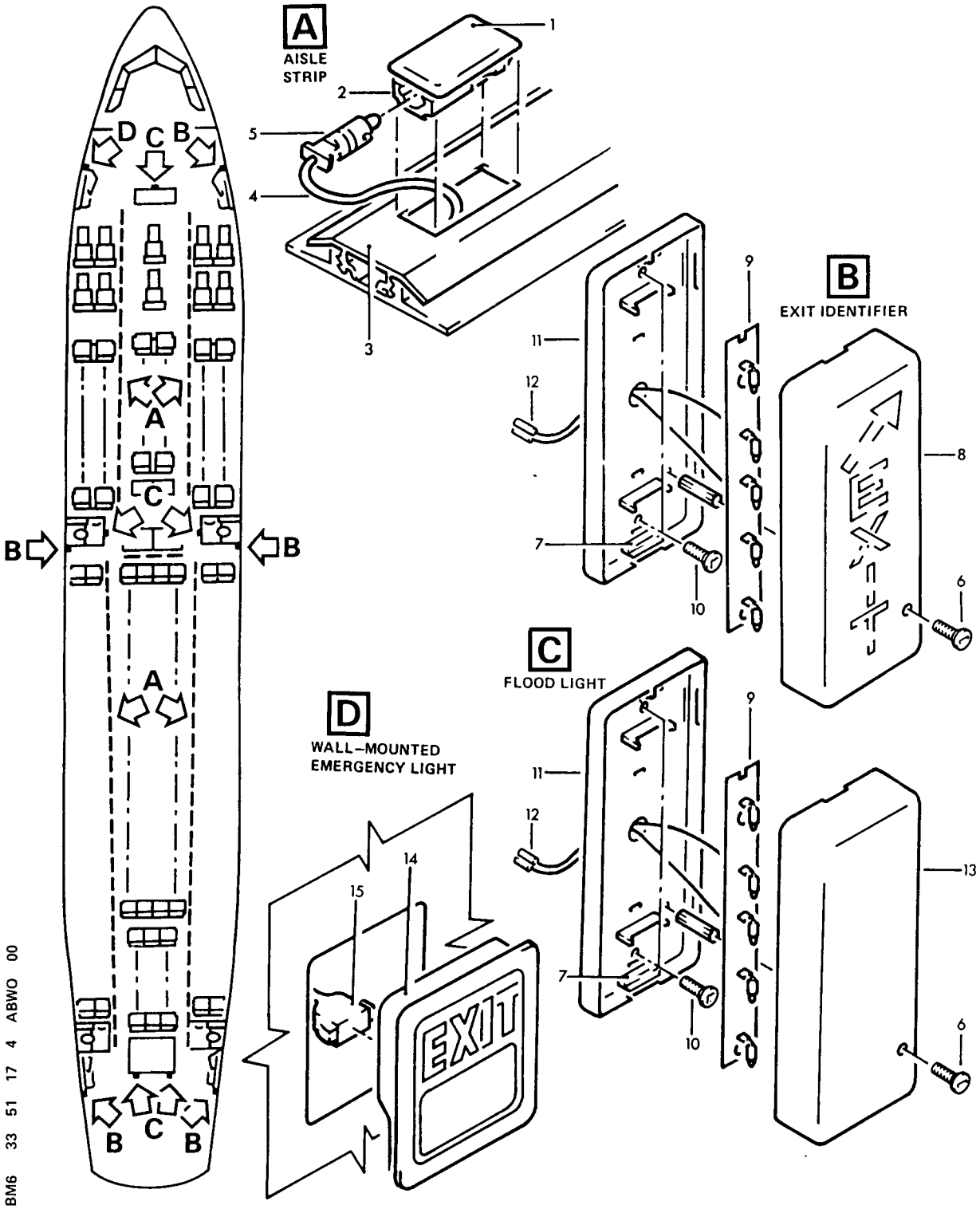
J. Close-Up
(1)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(2)De-energize aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).

R **ON A/C 101-200,

R K. Test
R (1)Connect electrical ground power unit and energize aircraft electrical network (Ref. 24-41-00, P. Block 301).
R (2)Remove safety clips and tags and close circuit breakers 20WL, 21WL and 24WL.
R (3)Carry out the following test procedure:

R ACTION	RESULT
R 1. On panel 818VU: R - press pushbutton switch EMERG (28WL).	In passenger compartment: - all emergency lights come on.
R 2. On panel 818VU: R - Press pushbutton switch EMERG (28WL) again.	In passenger compartment: - all emergency lights go off.

R L. Close-Up
R (1)Make certain that working area is clean and clear of tools and miscel-



Floor Escape Path Marking Lighting
Figure 402

R

R laneous items of equipment.
R (2)De-energize aircraft electrical network and disconnect electrical ground
R power unit (Ref. 24-41-00, P. Block 301).

WARNING : BEFORE POWER IS SUPPLIED TO THE AIRCRAFT, MAKE CERTAIN THAT THE ELECTRICAL CIRCUITS, UPON WHICH WORK IS IN PROGRESS, ARE ISOLATED.
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR EMERGENCY EXITS (REF. 52-23-00, P. BLOCK 301).

1. Reason for the Job

A. Replacement of lamp assembly and bulb.

2. Equipment and Materials

ITEM	DESIGNATION
A.	Electrical Ground Power Unit - 3-Phase, 115/200 V, 400 Hz
Referenced Procedures	
- 24-41-00, P. Block 301	AC External Power Control
- 52-23-00, P. Block 301	Emergency Exits

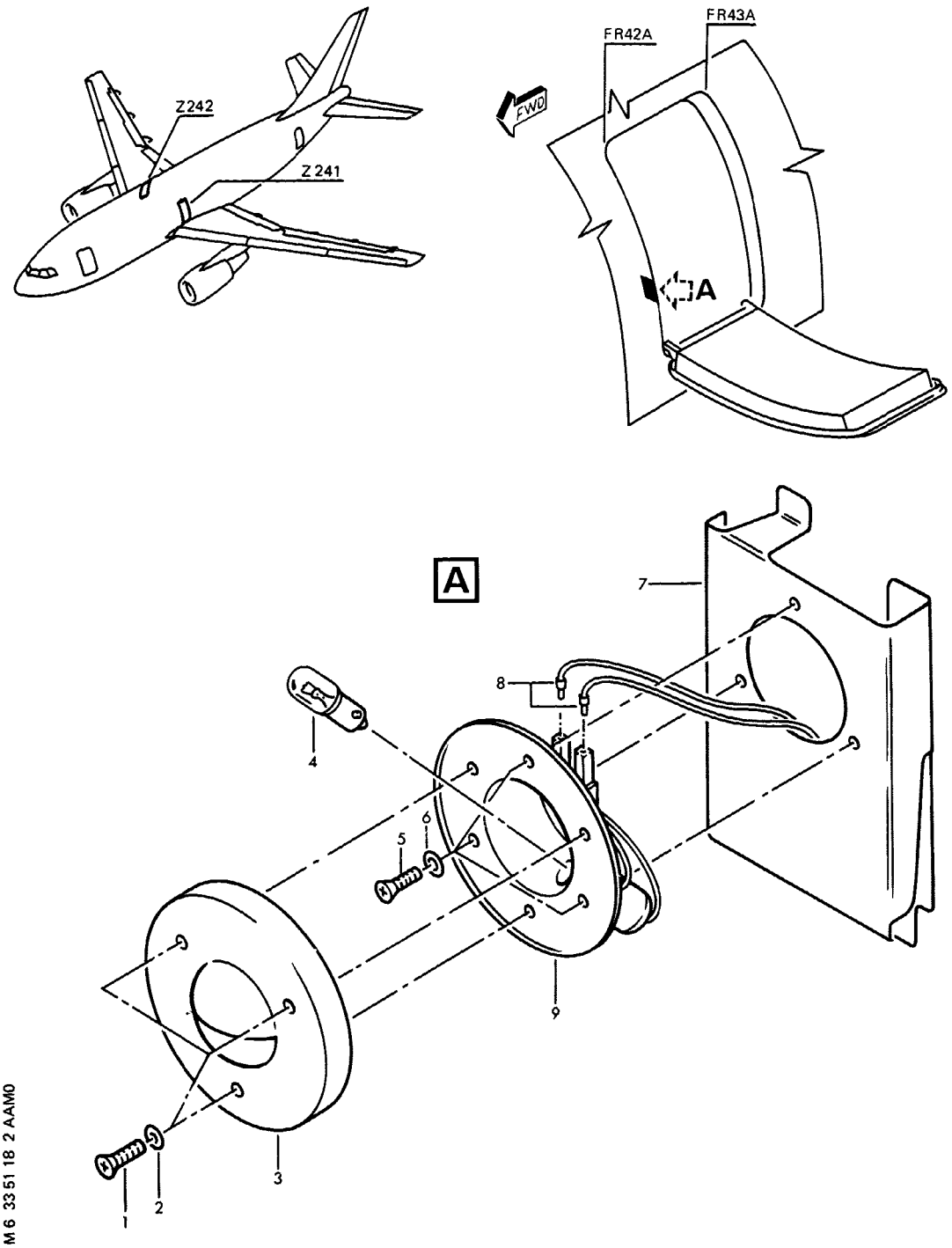
3. Procedure

A. Job Set-Up
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.
(1)Carry out before-maintenance procedure (Ref. 52-23-00, P. Block 301).
(2)On panel 436VU, make certain that switch EMER EXIT LT ON-ARM-DISARM (22WL) is in DISARM position.
(3)On panel 818VU, make certain that switch EMERG (28WL) is in OFF position.

B. Removal
(1)Open emergency exit (Ref. 52-23-00, P. Block 301).
(2)Remove screws (1), washers (2) and light cover (3).
(3)Remove bulb (4).
(4)Remove screws (5) and washers (6) from bracket (7).
(5)Disconnect electrical connectors (8).
(6)Remove light assembly (9).

C. Installation
(1)Position light assembly (9).
(2)Connect electrical connectors (8).
(3)Install light assembly (9) with screws (5) and washers (6).
(4)Install bulb (4).
(5)Install cover (3) with screws (1) and washers (2).
(Ref. Fig. 201)

D. Test
(1)Connect aircraft electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).



Overwing Emergency Light
Figure 201

ACTION	RESULT
(a)On panel 818VU: - press pushbutton TEST EMERG (25WL), for 1 sec and release.	At emergency exit: - overwing emergency lights flash (once). At panel 818VU: - internal light in pushbutton TEST EMERG (25WL) comes on for approximately 30 sec.

E. Close-Up

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.

(1)Carry out after-maintenance procedure (Ref. 52-23-00, P. Block 301).

(2)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.

(3)Close emergency exit (Ref. 52-23-00, P. Block 301).

(4)De-energize aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).

LAVATORY AUXILIARY LIGHT - REMOVAL/INSTALLATION

R **ON A/C 101-200,

1. Equipment and Materials

ITEM	DESIGNATION
A.	Stepladder, 1.0 m (3 ft. 3 in.)
B.	Electrical Ground Power Unit - 3-Phase, 115/200 V, 400 Hz

Referenced Procedures

- 24-41-00, P. Block 301	AC External Power Control
- 25-23-13, P. Block 401	Utility Area Ceiling Panels
- 26-17-11, P. Block 401	Smoke Detector
- 25-41-11, P. Block 401	Lavatory A

R **ON A/C 001-100,

1. Equipment and Materials

ITEM	DESIGNATION
A.	Stepladder, 1.0 m (3 ft. 3 in.)
B.	Electrical Ground Power Unit - 3-Phase, 115/200 V, 400 Hz

Referenced Procedures

- 24-41-00, P. Block 301	AC External Power Control
- 25-23-13, P. Block 401	Utility Area Ceiling Panels
- 26-17-11, P. Block 401	Smoke Detector
- 25-41-11, P. Block 401	Lavatory A
- 25-41-31, P. Block 401	Lavatory C

R **ON A/C 101-200,

2. Procedure

A. Job Set-Up
(1)Open, safety and tag the following circuit breaker:

PANEL	SERVICE	IDENT.	LOCATION
22VU	EMER LT-TOILETS	1WL	E26

(2)Position stepladder.

(3)Remove screws of ceiling panel.
(4)Pull ceiling panel downwards.
(5)Lavatory A
(a)Remove relevant utility area ceiling panel
(Ref. 25-23-13, P. Block 401).
(b)Remove smoke detector (Ref. 26-17-11, P. Block 401).
(c)Remove upper connections (Ref. 25-41-11, P. Block 401).

B. Removal
(1)Remove screws (4) and cover (5).
(2)Disconnect electrical connectors (3).
(3)Remove securing screws (2) and lavatory auxiliary light (1).

C. Installation
(1)Position lavatory auxiliary light (1) and secure with screws (2).
(2)Connect electrical connectors (3).
(3)Position cover (5) and secure with screws (4).
(4)Remove safety clip and tag and close circuit breaker 1WL.

R **ON A/C 001-100,

2. Procedure

A. Job Set-Up
(1)Open, safety and tag the following circuit breaker:

PANEL	SERVICE	IDENT.	LOCATION
22VU	EMER LT-TOILETS	1WL	E26

(2)Position stepladder.
(3)Remove screws of ceiling panel.
(4)Pull ceiling panel downwards.
(5)Lavatory A
(a)Remove relevant utility area ceiling panel
(Ref. 25-23-13, P. Block 401).
(b)Remove smoke detector (Ref. 26-17-11, P. Block 401).
(c)Remove upper connections (Ref. 25-41-11, P. Block 401).
(6)Lavatory C
(a)Remove relevant utility area ceiling panel
(Ref. 25-23-13, P. Block 401).
(b)Remove smoke detector (Ref. 26-17-11, P. Block 401).
(c)Remove upper connections (Ref. 25-41-31, P. Block 401).

B. Removal
(1)Remove screws (4) and cover (5).
(2)Disconnect electrical connectors (3).
(3)Remove securing screws (2) and lavatory auxiliary light (1).

C. Installation

(1)Position lavatory auxiliary light (1) and secure with screws (2).
(2)Connect electrical connectors (3).
(3)Position cover (5) and secure with screws (4).
(4)Remove safety clip and tag and close circuit breaker 1WL.

R **ON A/C ALL

CAUTION : MAKE SURE THAT THE AIR EXTRACTION GRILL, THE SMOKE DETECTOR AND THE AIR EXTRACTION DUCT ARE IN LINE WITH THE EXTRACTION AIRFLOW.
INCORRECT INSTALLATION CAN CAUSE MALFUNCTION OF THE SMOKE DETECTOR, IF FITTED.

R **ON A/C 001-100,

(Ref. Fig. 401)

R **ON A/C 101-200,

(Ref. Fig. 402)

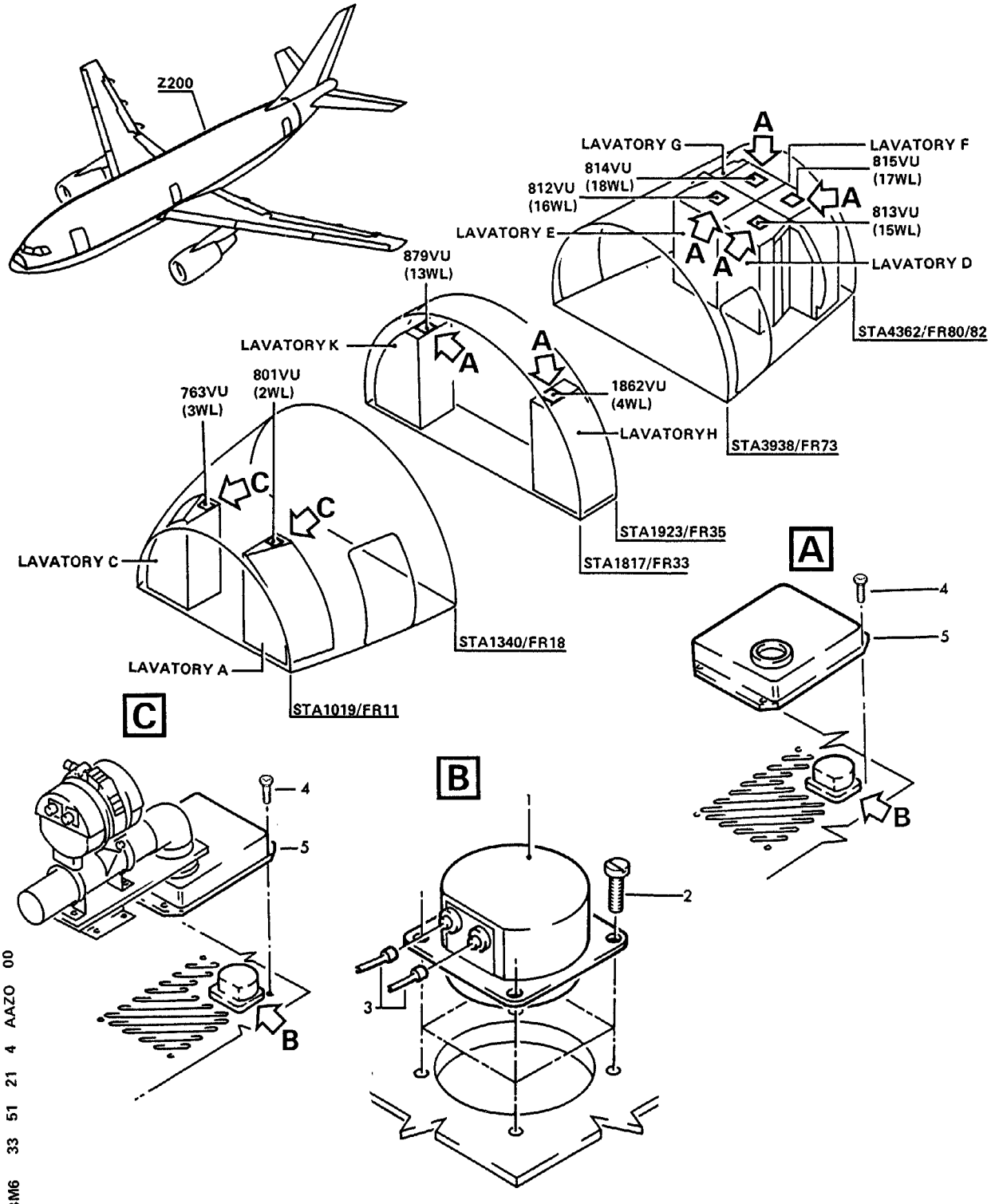
R **ON A/C ALL

D. Test
(1)Connect electrical ground power unit and energize aircraft electrical network (Ref. 24-41-00, P. Block 301).
(2)Carry out the following test procedure:

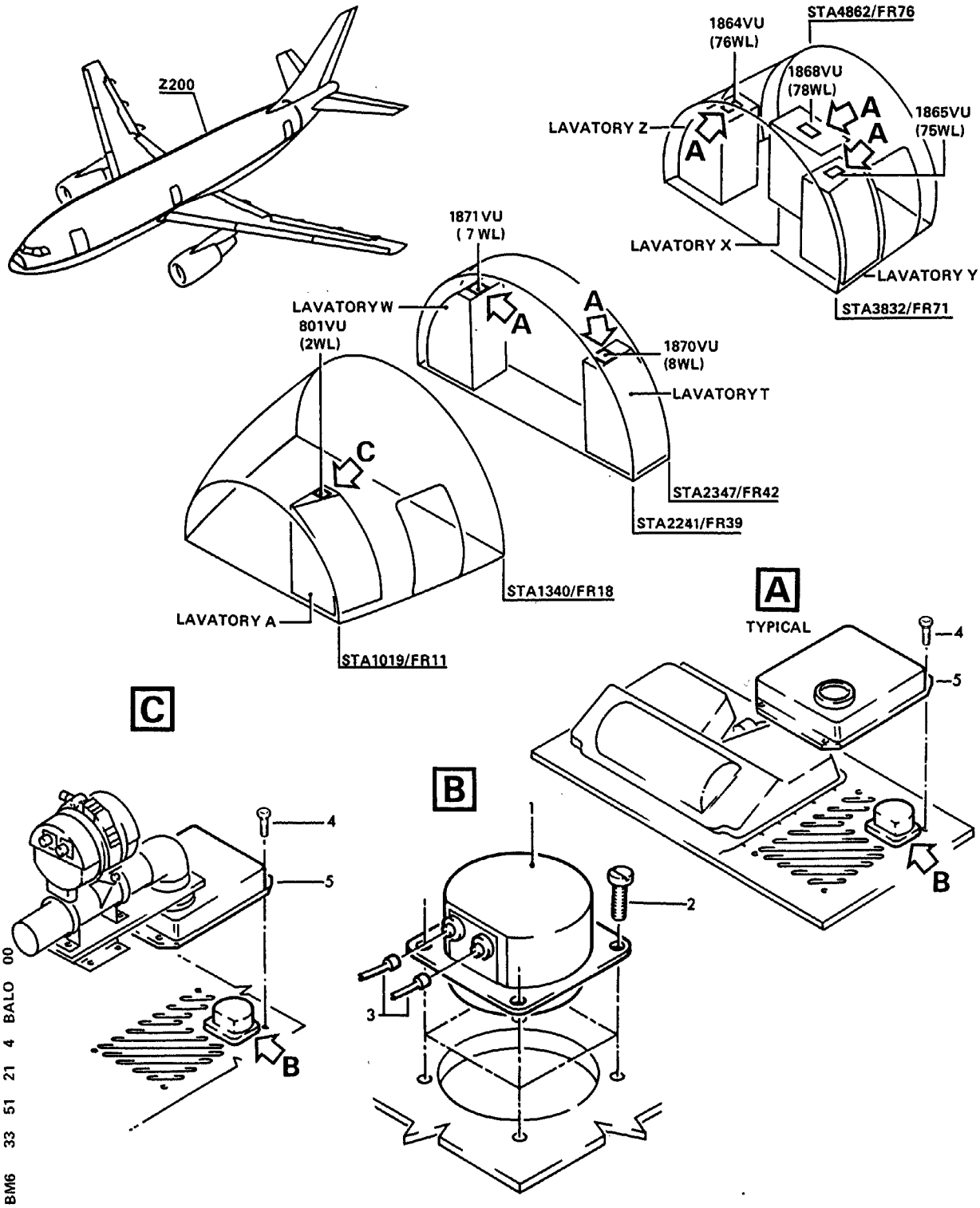
ACTION	RESULT
1. On panel 22VU: - remove safety clip and tag and close circuit breaker EMER LT TOILETS (1WL).	In each lavatory: - auxiliary light comes on.

R **ON A/C 101-200,

E. Close-Up
(1)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(2)Install upper connections (Ref. 25-41-11, P. Block 401).
(3)Install smoke detector (Ref. 26-17-11, P. Block 401).
(4)Install relevant utility area ceiling panel (Ref. 25-23-13, P. Block 401).
(5)Push up ceiling panel and secure with screws.
(6)Remove stepladder.
(7)De-energize aircraft electrical network and disconnect electrical



Lavatory Auxiliary Light
Figure 401



Lavatory Auxiliary Light
Figure 402

ground power unit (Ref. 24-41-00, P. Block 301).

R **ON A/C 001-100,

E. Close-Up
(1)Install upper connections (Ref. 25-41-11, P. Block 401).
(2)Install upper connections (Ref. 25-41-31, P. Block 401).
(3)Install smoke detector (Ref. 26-17-11, P. Block 401).
(4)Install relevant utility area panel (Ref. 25-23-13, P. Block 401).
(5)Push up ceiling panel and secure with screws.
(6)Remove stepladder.
(7)De-energize aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).
(8)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.